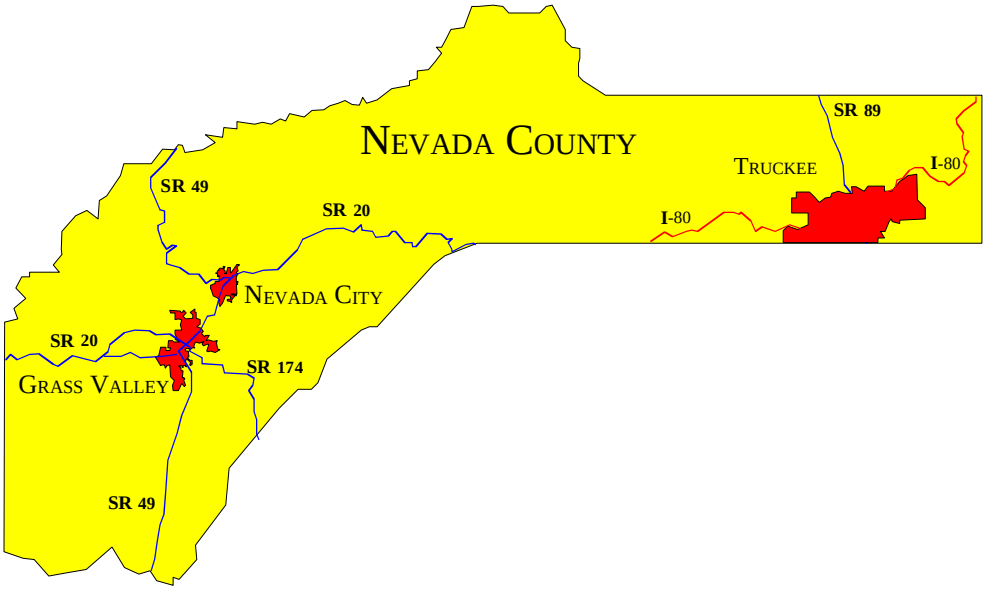
NEVADA COUNTY



2005

REGIONAL

TRANSPORTATION PLAN

January 10, 2006

NEVADA COUNTY TRANSPORTATION COMMISSION

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I. EXECUTIVE SUMMARY

Automobile travel is clearly the dominant mode of transportation in Nevada County, however, fuel costs, changes in technology and other factors may alter transportation in the future. To insure development of a coordinated and balanced transportation system, the Regional Transportation Plan (RTP) includes actions, funding recommendations, and policy direction necessary to meet the needs of each transportation system component in Nevada County. The RTP identifies existing and future transportation problems, proposes solutions, considers all modes of travel, and identifies anticipated funding for projects and programs considering both the short-term (10 year) and long-term (20 year) time horizons. Because the RTP has a "multi-modal" approach to transportation, it addresses social and environmental factors affecting Nevada County's transportation system, such as air quality, and transportation needs of specific segments of the population (e.g. elderly and transit dependent persons).

PURPOSE OF THE PLAN

As the Regional Transportation Planning Agency (RTPA) for Nevada County, California State law requires the Nevada County Transportation Commission (NCTC) to prepare, adopt, and submit an updated RTP to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every four years.

The purpose of this plan is to document the short-term (2005-2015) and long-term (2016-2027) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining a strong commitment to public health and environmental quality.

It is incumbent upon the Nevada County Transportation Commission to seek to involve and educate the citizens of the region as to the issues connected with transportation. Further, the Commission must be creative in assisting the region in developing the revenues to construct improvement projects.

POLICY ELEMENT

Regional Issues, Needs, and Goals

The main transportation issues in western Nevada County are related to providing infrastructure and services to meet the demands of a growing, and aging, population, while maintaining and enhancing the rural character and environmental qualities of the area. In eastern Nevada County, the issues stem from the high volumes of traffic generated by travelers taking advantage of the world-class recreational opportunities available in the Truckee-North Tahoe area. Acquiring adequate and timely funding for transportation improvements is the central need within all of the Nevada County issues.

Transportation issues facing Nevada County which have been identified as regionally significant include the following:

- Funding Shortages
- Air Quality Conformity
- Coordination of Land Use, Air Quality, and Transportation Planning
- Providing and Maintaining a Transportation System that Enhances Safety, the Efficient Movement of all People, Goods, Services, and Information, and Environmental Quality.
- Support New Technologies

Recognition of these issues leads to the overall goal of the Regional Transportation Plan which is to provide and maintain a transportation system that enhances safety, the efficient movement of all people, goods, and services, and environmental quality. In the Policy Element this overarching goal is divided into the following four goals:

1) Provide for the safe and efficient movement of all people, goods, services, and information.
2) Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.
3) Develop an economically feasible transportation system.
4) Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

The Regional Transportation Plan Policy Element identifies policies, objectives, and performance measures that are consistent with the goals included in local general plan documents, and that reflect consideration of environmental, social, and economic goals. (See pages 23 - 24)

Performance measures are a relatively new tool in regional transportation plans. Given the continuing instability of transportation funding programs, it is important to select and construct the most cost effective projects. The performance measures in this update of the Regional Transportation Plan provide a foundation for project selection. Future Regional Transportation Plans will build upon that foundation as data collection methods improve and the regional database becomes more complete. The operational performance measures included in this Regional Transportation Plan are aimed at identifying how proposed projects will:

- Improve safety
- Improve travel time
- Reduce congestion

Additional performance measures are included to:

- Insure consistency with general plan documents
- Identify cost effectiveness of projects and services
- Identify implementation of alternative transportation projects and strategies
- Enhance public awareness of transportation alternatives

ACTION AND FINANCIAL ELEMENTS

The purpose of the Action Element is to identify the short-term (2005-2015) and long-term (2016-2027) actions that will address the needs of the regional transportation system in Nevada County and the Goals and Objectives of the RTP.

The Action Element identifies the projects needed to improve transportation system operations. Based on the funding forecasts in the Financial Element, it is widely recognized that the region will not be able to "build its way out" of the identified problems. In order to accomplish the goal of providing for the safe and efficient movement of all residents, visitors, and goods, the Nevada County Transportation Commission must seek to program projects that will provide the best investment of public funds and assist local jurisdictions in bringing those projects to completion. In selection of projects, the communities must recognize the importance of protecting environmental quality, while maintaining a vital economy. Projects identified in the RTP support local land use and population projections and address economic development and social equity issues identified in the

General Plans of the County and the cities.

The Action Plan calls for an extensive list of improvements over the next twenty-year period of the Plan. As is true throughout the State, there are not enough existing federal, state, or local resources to fully fund all of the improvements identified in the RTP.

The Financial Element of the Regional Transportation Plan (RTP) outlines the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the 2005 Nevada County RTP. Appendix A-4 on page 112 provides a summary of funding programs available to the NCTC.

The Financial Element presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds.

In this summary, each of the following topics is discussed briefly:

- Regional Road Network
- Goods Movement
- Transit Services
- Non-Auto Facilities
- Intelligent Transportation Systems
- Transportation Systems Management
- Air Transportation
- Rail Transportation
- Air Quality

Regional Road Network

The network of roadways that facilitate the movement of people and goods within and through Nevada County is one of the most important components of the overall transportation system. This section of the RTP identifies the regionally significant roadways and the improvements that will be required over the horizon of the Plan. Roadways are determined to be of regional significance if they meet one or more of the following criteria:

- Roadways of statewide significance
- State or interstate highways
- Principal arterials connecting Nevada County with other regions or counties
- Rural arterials connecting two or more urbanized areas
- Roadways that provide access to significant commercial, industrial, recreational, or institutional activity centers

The network of local roadways provides access to all areas of Nevada County, and each one is an important part of Nevada County's transportation system. However, the RTP seeks to identify deficiencies and propose solutions for local roadways that are of regional significance, connecting population centers with commercial, industrial, recreational, or institutional activity centers.

Every two years the NCTC submits regional transportation projects to the state for funding. The project listing is called the Regional Transportation Improvement Program (RTIP). The 2004 RTIP included three projects:

Dorsey Drive Interchange (western Nevada Co.)
State Route 49 Widening – Placer County to Grass Valley (western Nevada Co.)
SR 89 South –Widening at the Union Pacific Railroad Grade Separation (eastern Nevada Co.)

Table 6 (See page 39) is a listing of short and long-term Regional Road Network improvements. Funding for State highway and regional projects is presented in Tables 15-18 (See page 90-93).

Table 17, indicates that based on "reasonably available" funding, Nevada County Transportation Commission should be allocated sufficient funds to complete the projects included in Table 6, Financially Constrained Regional Transportation Projects List. However, given the instability in State transportation funds since 2003, the action plan for the State Highway projects listed in Table 6 is to work with Caltrans and the California Transportation Commission to insure that the promised funding for these projects is received.

Table 17 also identifies adequate funding for the "fiscally constrained" regionally funded projects listed in Table 6. However, most of these regional projects are tied to mitigation fees and therefore are subject to a timeframe predicated on implementation of development projects. In order to construct regional projects in a timeframe that is consistent with expressed community needs, NCTC will work with its member agencies to identify and implement additional revenue sources. One of the first steps in that action plan is to complete a public opinion poll of transportation projects and alternative revenues sources in early 2006. Unless NCTC is able to implement new funding sources, prioritization and scheduling of the unconstrained (unfunded) State Highway and Regional Projects listed in Table 7 (See page 43) will be an exercise in futility.

The deficit for State highway and regional projects that may be addressed by funding programs administered by NCTC is $70,678,000. The deficit for western Nevada County totals $56,504,000 and the deficit for eastern Nevada County totals $14,174,000.

During the last two decades, gasoline tax revenues have not kept pace with either inflation or need. Existing revenue sources are not sufficient to offset these loses. Significant additional revenues over and above the existing revenues are needed. The NCTC's overall funding strategy to address the identified funding deficit is as follows:

- Aggressively Pursue State and Federal Funding
- Consider Pursuing a Local Sales Tax for Transportation Improvements
- Use CEQA Mitigation to Construct Needed Improvements
- Pursue Low-Cost Innovations and New Technological Solutions

The only one of these strategies that can be easily quantified is implementation of a local sales tax. Based on recent sales tax revenues generated in Nevada County, it is estimated that between 2005 and 2027 a ½ cent sales tax would raise approximately $190,600,000. Thus this strategy has the potential to cover the identified deficit for State highway and regional projects and provide revenue for additional transportation projects or services that may be desired by Nevada County citizens. Further, sales tax revenues can be used as a finance tool to accelerate completion of improvements.

Goods Movement

Projects that enhance goods movement help to maintain regional economic vitality. Further, the State highways and rail routes that traverse Nevada County are an important gateway linking California to the rest of the Nation and distributing goods to and from the Pacific Rim. As the State of California

develops funding programs aimed at improving goods movement, Nevada County may be in a position to receive some of those funds for the regional transportation system. (See Goods Movement Action Plan, page 48)

Transit Services

Currently public transit is a relatively small component of Nevada County's transportation system. However, for those citizens who are dependent on these services, public transit is a life sustaining necessity. Also, future enhancements to public transit may prove to be a means of reducing congestion and providing access to jobs. Tables 24 and 26 indicate that there will sufficient revenue to maintain the existing transit programs; however additional revenues will be needed to fund service expansions. (See Transit Services Action Plan, page 55, and Transit Funding Forecasts, Tables 20-29, starting on page 93)

Non-Auto Facilities

Pedestrian and bicycle facilities are transportation amenities that enhance mobility and add vitality to communities. While funds for these facilities are limited, it is important to have comprehensive plans in place and projects "on the shelf" to take advantage of funding opportunities when they are available. (See Non-Auto Facilities Action Plan, page 60, and Non-Motorized Transportation Funding, page 95)

Intelligent Transportation Systems Action Plan

The presence of a significant number of "high tech" businesses and the desirability of Nevada County as a place to live and recreate, provides an opportunity to take advantage of Intelligent Transportation Systems projects and programs. NCTC's participation in the development and maintenance of the Tahoe Gateway Counties Intelligent Transportation Systems Strategic Deployment Plan insures that the region will have a competitive edge in vying for any State or Federal Intelligent Transportation Systems funds. (See Intelligent Transportation Systems Action Plan, page 63)

Transportation Systems Management

Transportation Systems Management strategies can be effectively employed to reduce congestion and improve operation of the transportation system with relatively small capital expenditures. Emerging technological advances in telecommunications and internet commerce have potential to add capacity to the transportation system and improve air quality. (See Transportation Systems Management Action Plan, page 68)

Aviation

Although aviation facilities within Nevada County do not handle a large number of passenger trips, maintenance and enhancement of regional airports is important for the provision of emergency services and to enhance business and recreational activities. Inclusion of aviation facilities in the Regional Transportation Plan insures that local airports remain eligible for State and Federal grant funds. (See Aviation Action Plan, page 72)

Rail

Currently the rail corridor that parallels Interstate 80 along the southern border of Nevada County is a major artery for goods movement that brings shipments to and from the Ports of

Oakland and Stockton. To the west of Nevada County the Capitol Corridor is a rapidly growing intercity passenger service. Expansion of the Capitol Corridor passenger service has significant potential for bringing visitors to the Truckee – North Tahoe resort area. It is important for the Nevada County Transportation Commission to monitor State and Federal legislation and changes in Union Pacific rail operations in order to enhance the opportunity to improve rail service to the region. (See Rail Action Plan, page 79)

Air Quality

Nevada County has been thrust into the Air Quality arena by virtue of its designation as a basic non-attainment area under the Federal 8-hour ozone standards. While the majority of pollutants that cause the violations of Federal standard are transported to western Nevada County from Sacramento and the San Francisco Bay area, NCTC must identify and implement transportation projects that will demonstrate that the region is taking reasonable steps to address the emissions generated within the County. (See Air Quality Action Plan, page 83)

II. INTRODUCTION

PURPOSE

As the Regional Transportation Planning Agency (RTPA) for Nevada County, California State law requires the Nevada County Transportation Commission (NCTC) to prepare, adopt, and submit an updated RTP to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every four years.

The purpose of this plan is to document the short-term (2005-2015) and long-term (2016-2027) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining Nevada County's commitment to public health and environmental quality.

A list of common acronyms are defined in Appendix A-1 for quick reference.

A "checklist" approach has been used to ensure all "planning requirements" have been addressed. Please refer to Appendix A-8 on page 157 that demonstrates compliance with the requirements. The checklist can be used as a roadmap to the RTP response for each component of the plan.

Environmental Considerations

An addendum to the Program Environmental Impact Report (EIR), State Clearinghouse #99072038, was prepared in compliance with Section 15164 of the California Environmental Quality Act (CEQA). An EIR is an informational document, the purpose of which is to inform public agency decision makers and the general public of the significant environmental impacts of a proposed project, to identify possible means to minimize significant effects, and to describe reasonable alternatives to the project. As defined in CEQA, "significant effect on the environment", means "a substantial, or potentially substantial adverse change in the environment." Although the EIR does not dictate the lead agency's ultimate decision in adopting the RTP, it must be considered, along with any other information, to assist the lead agency's decision-making process. As provided in the CEQA Guidelines, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In complying with this obligation, the public agency has to balance a variety of public objectives, including economic, environmental, and social.

Because the RTP is a program level planning document containing general policies, guidelines, and lists of proposed projects for which specific design details have not yet been completed for all projects, the object of the environmental analysis in this Program Level EIR is to provide a general overview of the potential impacts of the recommended RTP improvements. The degree of specificity of this Program Level EIR corresponds with the degree of specificity in the proposed RTP. The RTP provides limited information on site-specific transportation improvements; therefore, the EIR is limited in its ability to precisely determine potential significant site-specific impacts associated with future transportation improvement projects. Analysis of site-specific environmental impacts of transportation improvement projects will be the responsibility of the lead agency for the specific project and identified in the project specific environmental documentation.

Three long-range transportation system scenarios were examined in the environmental documentation process as alternatives to the Nevada County RTP. The Financially Constrained Scenario represents the proposed Nevada County Regional Transportation Plan.

The **Financially Constrained Scenario** is designed to address and to emphasize the implementation of transportation projects that currently have funding secured and projects that would be financed through Federal, State, and local funding processes that are already set in place. Although improvements under this scenario are based on identified future needs, funding forecasts indicate that all of the improvements necessary will not be able to be implemented due to funding constraints.

The three transportation system scenarios evaluated as alternatives to the RTP in the Draft Program Environmental Impact Report are described below:

1. The **Transportation System Management and Transportation Demand Management** (TSM/TDM) **Alternative** is designed to minimize roadway impacts and to manage the need for roadway capacity using techniques other than new construction. It also emphasizes the development and maintenance of alternative transportation projects, including public transit, aviation, bicycles, and other non-motorized transportation.

2. The **No Project Alternative** includes services and facilities which currently exist and the maintenance of those services and facilities. It would not include those projects which have not yet been funded or constructed.

3. The **Additional Funding Alternative** represents an expanded funding program needed to construct all or nearly all of the improvements listed in the RTP. This alternative assumes a new funding source equivalent to a ½ cent sales tax in Nevada County. A local funding initiative would need to be passed for a sales tax to be implemented.

RTP PROCESS

The NCTC is responsible for the quadrennial preparation of the Nevada County RTP. NCTC must ensure that all requirements of the RTP process are met. The NCTC then prepares a draft report that includes all of the required elements, and solicits public comment from the Technical Advisory Committee (TAC), jurisdictions, neighboring Regional Transportation Planning Agencies, and a wide variety of groups, including the general public. Caltrans encourages the consideration of transportation related concerns of Native American Tribal Governments within the RTP boundaries; however there are no federally recognized tribes in Nevada County. The comments solicited are responded to and/or included in the final document as appropriate. Environmental documentation, in conformance with California Environmental Quality Act (CEQA) is also prepared. NCTC then adopts the environmental documentation and RTP in accordance with State and Federal requirements.

NCTC will be responsive to changing conditions throughout the county on an ongoing basis. As new or redefined projects are needed, the action and financial sections will be amended.

Government Participation

The planning of the county transportation system is accomplished through the coordination of various governmental agencies, advisory committees and public input:

- The **Nevada County Transportation Commission**, serving as the Regional Transportation Planning Agency, is made up of seven Commissioners and four staff. The Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives, the incorporated cities of Grass Valley, Nevada City, and the Town of Truckee each have one representative.

- The **Technical Advisory Committee** is made up of representatives of local public works and planning departments, Caltrans, public airport operators, the air pollution control district, and public transit operators. The Committee provides technical input on transportation issues and ensures that there is coordination and cooperation in the transportation planning process.
- The **Transit Services Commission** provides policy direction and advises the transit operator in western Nevada County on matters relating to the daily operations of the transit and paratransit services. The Transit Services Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives; the City Councils of Grass Valley and Nevada City each have one representative, and jointly appoint one city-at-large representative.
- The **Western Nevada County Conformity Working Group** is made up of representatives from the Nevada County Transportation Commission, Northern Sierra Air Quality Management District, Caltrans, California Air Resources Board, U.S. Environmental Protection Agency, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Citizen Participation

Public involvement is a major component of the transportation planning process. The NCTC makes a concerted effort to solicit public input in many aspects of transportation planning within Nevada County. Specific examples are listed below:

- An article on the preparation of the RTP was included in the NCTC May 2005 Newsletter.
- Copies of the Draft RTP were available for review at the main public libraries in western and eastern Nevada County, as well as, on the NCTC website.
- Press releases were sent to the media establishments in western and eastern Nevada County notifying them the Draft RTP was available for review and comment and noting some key findings.
- Public hearings are held and noticed in the main newspapers in western and eastern Nevada County prior to adoption of the RTP and Regional Transportation Improvement Program.
- Each year, public notifications are sent out to encourage participation in transportation planning processes, such as the annual unmet transit needs public hearing held by NCTC and numerous public workshops relating to the transportation projects and planning activities of the NCTC.
- Citizens are encouraged to attend and speak at the NCTC meetings on any matter included for discussion on the agenda at that meeting.
- The NCTC produces and distributes a bi-monthly newsletter and maintains a website in an effort to keep the public informed of transportation planning efforts underway in Nevada County.
- The Social Services Transportation Advisory Council (SSTAC) consists of appointed citizens representing a wide range of transit dependent groups. The SSTAC recommends action to the NCTC relative to the unmet transit needs finding and

advise the Commission on transit issues. In compliance with Public Utilities Code 99238 the current SSTAC consists of the following representatives:

- One representative of potential transit users who are 60 years of age or older.
- One representative of potential transit users who are disabled.
- Two representatives of the local social service providers for seniors.
- Two representatives of local social service providers for the disabled.
- One representative of a local social service provider for persons of limited means.
- Two representatives from the local consolidated transportation service agency.
- Two representatives of transit users in western Nevada County.
- One representative of transit drivers in western Nevada County.

Every person in Nevada County is affected by transportation and, as such, is an important component of the transportation planning process. All interested parties are encouraged to provide input into the transportation planning process.

Regional Setting

Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Figure 1 (See page 15) displays the regional area and key statistics relative to the area.

Nevada County's geography has led to distinctive development patterns in the eastern and western portions of the County. Western Nevada County is very attractive for residential and commercial developments due to the rural character of the area and the quality of life it affords.

The Grass Valley/Nevada City area has become the primary population center in western Nevada County. This foothill area of the Sierras is a combination of tree-covered rolling hills and stream channels, which have greatly affected road and utility locations. The major transportation facilities in western Nevada County are State Routes 20, 49, and 174.

Eastern Nevada County is known for its many recreational opportunities. This mountainous area of the Sierra Nevada offers a full range of winter and summer recreational activities, such as skiing, camping, and hiking. These recreational opportunities and the proximity of this area to Reno and Lake Tahoe increase its popularity as a tourist attraction.

The Town of Truckee is the major population center for eastern Nevada County. In addition to being a station for rail freight and passenger service, Truckee is at the crossroads of Interstate 80 and State Routes 89 and 267. Interstate 80 is a major transcontinental route, and the two state routes are the northern entrances to the Tahoe Basin.

STUDY AREA

As displayed in Figure 1, the study area includes the entire County of Nevada. Travel characteristics within the study area vary between the eastern and western County primarily due to their distinctive land use patterns.

The eastern portion of the study area contains several land uses, which attract more trips than they produce, such as the ski resorts and the Truckee shopping area. This land use pattern causes many

trips to end within the area, but originate outside the area. Another prominent travel characteristic of the eastern County is the trips on the I-80 Corridor that pass through the area.

Land use patterns in the western portion of the study area typically consist of more residential uses than commercial and industrial uses. Large residential areas such as Lake of the Pines, Lake Wildwood, and Alta Sierra create many trips that originate within the study area, but end outside the area, particularly for trips from home to work.

DEMOGRAPHIC TRENDS

In the period between 1975 and 1990, the average annual population growth rate in Nevada County exceeded five percent. This growth rate was one of the highest in the state and did not allow local governments to keep pace with infrastructure, maintenance, and improvements. Fortunately, the growth rate slowed significantly between 1990 and 2000 and continues to be the trend.

As might be expected, population growth in western Nevada County has occurred predominantly around the Grass Valley/Nevada City area. In addition, much of Nevada County's growth has occurred on large lots in the rural areas of the county, which does not assist in the cost-effective operation of public transportation services. Outside the Grass Valley/Nevada City area, a significant amount of population growth has occurred in the following large residential subdivisions:

- Lake Wildwood — Approximately 2,836 residences. Located adjacent to Highway 20 west of Grass Valley/Nevada City near the Yuba County line.
- Lake of the Pines — Approximately 1,800 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City near the Placer County line.
- Alta Sierra — Approximately 2,600 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City.

In eastern Nevada County the Town of Truckee, which incorporated in 1993, experienced rapid growth between 1990 and 2000. According to an analysis of Truckee's population growth since 1990 conducted by the Town's Planning Department in 2004, the average annual growth rate between 1990 and 2000 was 4.5 percent. Since 2000, the average annual growth rate slowed, between 2000 and 2004, to an average annual growth rate of 2.0 percent. Much of the population growth has occurred in the large Tahoe-Donner, Glenshire, and Prosser residential subdivisions.

TABLE 1
RECENT POPULATION CHANGE BY LOCATION

NEVADA COUNTY	2000 Pop.	% Change 2000-01	2001 Pop.	% Change 2001-02	2002 Pop.	% Change 2002-03	2003 Pop.	% Change 2003-04	2004 Pop.
Grass Valley	10,922	7.6%	11,750	0.9%	11,850	0.4%	11,900	1.3%	12,050
Nevada City	2,996	-0.2%	2,990	0.3%	3,000	0.3%	3,010	-0.3%	3,000
Truckee	13,864	1.3%	14,050	3.6%	14,550	1.4%	14,750	1.7%	15,000
Unincorporated	64,251	-1.2%	63,500	1.6%	64,500	1.6%	65,500	0.8%	66,000
County Total	92,033	0.3%	92,300	1.7%	93,900	1.3%	95,100	1.1%	96,100

Source: State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties, and State, 2001-2004, with DRU Benchmark.* Sacramento California, May 2004.

Nevada County's population increased 1.1 % between January 2003 and January 2004. Data from the California Department of Finance indicate that for this period, Nevada County's annual growth rate was lower than neighboring Placer County (3.0%), El Dorado County (1.3%), Yuba County (1.6%), and the state's growth rate of 1.5%.

Almost all communities in Nevada County are projected to experience at least moderate growth over the next 20 to 25 years, which implies that there will be additional demand placed on the area's roadway system. The U.S. Census Bureau, Division of Population cumulative estimates for components of population change indicates that the total net migration for Nevada County between April 1, 2000 and July 1, 2004 was 6,276. Specific data from the 2000 Census for the migration flow to Nevada County, which identifies the previous county of residence in 1995, can be viewed online at the following link: http://www.census.gov/population/www/cen2000/ctytoctyflow.html

The California Department of Finance's *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*, released in May of 2004, estimate that Nevada County's population will be 106,210 by the year 2010. According to this estimate, Nevada County's population would increase 10.5% over the next six years (2004-2010) with an annual average growth rate of approximately 1.8 percent. These population projections also estimate that Nevada County's population in the year 2020 will be 126,912. According to this projection, the population would increase 32% over the next sixteen years at an average growth rate of 2.0 percent. By the year 2030 Nevada County's population is projected to be 137,965. As Nevada County's population increases, additional demand will be placed on the existing transportation infrastructure. Therefore, the analysis contained in this RTP reviews the need for improvements to existing facilities, as well as, the need for new facilities.

TABLE 2

2000 CENSUS NEVADA COUNTY POPULATION BY AGE COMPARISION WITH CA

Age Range	Number	Percent Nev. Co.	Percent California
0-9	9,995	10.9	15.3
10-19	13,224	14.4	14.8
20-34	11,350	12.3	22.3
35-54	30,851	33.5	29.4
55-64	10,501	11.4	7.7
65-84	14,440	15.7	9.4
85 +	1,672	1.8	1.2
Total Pop. 2000	**92,033**	**100.0**	**100.0**

U.S. Census Bureau Profile of General Demographic Characteristics: 2000, Census 2000 Summary File 4

The 2000 Census data indicates that the median age in Nevada County was 43 years of age compared to 33 for the entire state of California. Nevada County's largest population by age in 2000 was the 35-54 age group at 33.5% of the County population. The second largest population by age was the 65-84 age group at 15.7% of the County population compared to a statewide percentage of only 9.4%. The 20-34 age group for Nevada County as a percentage was approximately only half of the statewide percentage by comparison.

In 1999, Leigh, Scott, & Cleary prepared the *Nevada County Transit and Paratransit Users Demographic Study* for the NCTC. This study completed an analysis of the demographic trends impacting transit demand in Nevada County. This report presented a statistical database of demographic information related to the existing and projected population of the county. The study acknowledged that the county population is growing, and that a substantial proportion of this growth has been generated by people retiring to Nevada County. As these residents grow older it has the potential to further increase the need for services. The study indicated that the number of frail elderly (age 75 and above) are projected to increase soon after 2015. The study also projected that the county's population of elderly (age 65 and older) and potentially frail elderly persons that live in eastern Nevada County are expected to nearly double by 2015. As persons aged 65 and older are a major transit market, this suggests that the need for transit services in eastern Nevada County will increase at a faster rate than will the need in western Nevada County. The report also forecasted that the population of western Nevada County, and resulting demand for transit service is expected to continue to spread out away from the urban centers of Grass Valley and Nevada City. As rural transit trips tend to be quite long and more expensive on a per trip basis in contrast to urban service, this indicates a need for long-term expansion in transit funding revenues.

The 2000 Census Journey-to-Work data for Nevada County indicates that prominent mode of choice is the automobile as indicated by 75.4% of workers who drove alone and 12.7% who carpooled. The mean travel time to work is 26 minutes.

Travel characteristics within Nevada County vary widely according to the region in which it occurs. The western portion of the County contains a large number of trip producing (residential) land uses in relation to trip-attracting (office and commercial) land uses. Approximately 80 percent of the developed land contained residential uses. This causes many trips to originate in this area with a destination outside of the area. Travel within the eastern portion of the County, however, is driven by a greater quantity of trip attracting land uses than trip-producing uses. This area is characterized by many recreational and tourist attractions, which causes large amounts of traffic to originate outside the area with destinations either inside or through the area. Additionally, the 2000 Census and Bureau of Economic Analysis data for 2000 indicate that, of the 41,533 employed residents in the County, 11,006 worked outside the County or approximately 26%. The Bureau of Economic Analysis data also indicates that 4,244 people in the local work force commute into Nevada County to work.

TABLE 3
2000 CENSUS JOURNEY-TO-WORK MODE SPLIT

Mode (Home-based work trips)	Nevada County
Drive Alone	75.4%
Carpool	12.7%
Public Transportation	0.7%
Bicycle	0.3%
Walk	2.7%
Worked at Home	7.5%
Other	0.5%

U.S. Census Bureau 2000 Census

TABLE 4
2000 CENSUS TRAVEL TIME TO WORK

Nevada County workers who did not work at home	Number	Percent
Less than 10 minutes	6,552	17.4%
10 to 14 minutes	7,064	18.8%
15 to 19 minutes	6,018	16.0%
20 to 24 minutes	5,320	14.2%
25 to 29 minutes	1,677	4.5%
30 to 34 minutes	3,154	8.4%
35 to 44 minutes	1,582	4.2%
45 to 59 minutes	2,159	5.7%
60 to 89 minutes	2,392	6.4%
90 or more minutes	1,679	4.5%
	37,597	**100.0%**

Journey-to-Work: 2000, Census 2000 Summary File 4

Approximately 52.2% of Nevada County workers that commute travel less than 20 minutes to their place of employment. The Census data indicates that 37% of workers commute between 20 – 59 minutes and 10.8% commuted from 60 – 90+ minutes to work. Since the 2000 Census data indicated that 11,006 Nevada County residents worked outside of the County, one could conclude based on the number of workers associated with the commute times above, that workers with a travel time slightly above 20 minutes most likely are traveling to an employment destination outside of the County.

TABLE 5
NUMBER OF VEHICLES PER HOUSEHOLD (HH)

Number of Vehicles Per HH	HH's	Percentage
None	1,742	4.7%
1	10,234	27.7%
2	15,532	42.1%
3 or more	9,386	25.4%
	36,894	**100.0%**

Profile of Selected Housing Characteristics: 2000, Census 2000 Summary File

As shown in Table 5, the 2000 Census counted 1,742 occupied housing units with zero vehicles available in Nevada County (4.7%) compared to 3.5% zero vehicle households identified in the 1990 Census. Planning efforts for the region need to recognize the demographics of Nevada County that make it unique. Nevada County's population mix is older than the statewide average. As the existing population ages it will creates mobility needs that the region's resources will be challenged to meet.

Figure 1 Study Area

III. POLICY ELEMENT

PURPOSE

The Regional Transportation Plan Policy Element identifies the transportation goals, objectives, performance measures, and policies to meet the needs of the region and reflects consideration of environmental, social, and economic goals.

The goals, objectives, and policies have been developed to form the basis of the Action Element of the Regional Transportation Plan, as well as, being the foundation for long term planning. Since, the projects and actions contained in the Action Element are constrained by the revenue forecasts identified in the RTP Financial Element; it is consistent with regional goals, objectives, and policies. In addition land use decisions and regional transportation policy are linked to the region's air quality.

The purpose of the Policy Element is to set a policy framework by which the County's mobility needs are identified and met. The goals, objectives, and policies listed below are the result of an extensive public participation program associated with the Nevada County General Plan Update process, as well as, direction received from the various decision-making entities in the County. These entities include, but are not limited to, the NCTC, the Nevada County Planning Commission and Board of Supervisors, and key representatives of Grass Valley, Nevada City, and the Town of Truckee.

REGIONAL ISSUES

The major transportation issues facing western Nevada County include the increased demand for transportation resulting from community growth, and the need for additional funding to construct facilities and provide services to meet the existing and future demand. The construction of the Dorsey Drive Interchange is a priority project included in the Regional Transportation Improvement Program (RTIP). This interchange project will provide access to the Sierra Nevada Memorial Hospital and the Sierra College – Nevada County Campus and help to reduce congestion at adjacent interchanges. State Route 49 is western Nevada County's main link to the Interstate 80 corridor and the Sacramento area. State Route 49 experiences peak hour congestion and is also a priority project included in the NCTC's RTIP. Area businesses and residents hope to improve safety on SR 49 and reduce congestion and the associated traffic delays through the completion of the planned widening of this facility from Wolf/Combie Road to Grass Valley. There is a strong desire to maintain the area's rural ambiance and enhance its natural qualities, while improving the safety and operation of transportation facilities. To accomplish these desires, it will be important to promote and enhance regional transit service, implement appropriate demand management and systems management strategies, and develop comprehensive corridor plans that utilize design features for highway improvements that are in concert with community standards.

The major transportation issues in eastern Nevada County are related to the tremendous amount of regional traffic and its resulting environmental impacts. Major arterial routes in eastern Nevada County have peak period demands that exceed system capacities. Because of environmental and funding constraints, large-scale highway construction to meet the demand is rarely realistic and often undesirable. The widening of the SR 89 Grade Separation or locally known as the "Mousehole" is another important RTIP project in eastern Nevada County that would help to alleviate peak season congestion and improve safety for pedestrians is the. While some highway construction will aid the situation, there is an urgent need to implement demand management strategies on a regional basis, and to enhance alternatives to the automobile**.**

With the population in Nevada County projected to increase over the period of the plan, the provision and promotion of transportation alternatives such as transit and Transportation Demand Management (TDM) measures will be important. One TDM measure that currently is available in the incorporated cities and some of the unincorporated areas of Nevada County is access to broadband internet services. Expanding broadband services into rural areas would provide more opportunities for telecommuting, conducting government business online, shopping online, and online educational opportunities. Thereby, assisting to reduce the number of automobile trips made during peak time periods.

Goals, objectives and policies also provide regional input for consideration in the State evaluation of significant transportation issues. The central need within all of these issues is acquiring timely and adequate funding. Transportation issues facing Nevada County, which have been identified as regionally significant, include the following:

Transportation Funding Shortages

Between fiscal year 2002/03 and 2004/05, approximately $3.3 billion has been diverted from transportation sales tax funds to the State General Fund. The diversion of sales tax revenues has occurred even though in 2002 nearly 70% of the voters approved Proposition 42, which required that the State sales tax on motor fuels be used for transportation. There is no provision to repay these funds in the near future.

"Where the State once had a transportation program funded almost exclusively from user fees protected by the California Constitution (gasoline taxes and weight fees), we now have a program dependent primarily on motor fuel sales taxes, without constitutional protection. … The elimination of the state transportation construction program over the past two years is unprecedented, the result of a basic structural problem in California's system of transportation financing." (CTC 2004 Annual Report)

As a result of the Proposition 42 funds not materializing, the 2004 STIP cycle included no new funding and local cities and counties did not receive funds for the maintenance and rehab of local streets and roads. Another issue is the rising construction costs that are a result of supply and demand for steel, oil, and other raw materials used for construction. An unstable source of transportation funding makes it extremely difficult for a local jurisdiction to adequately plan and deliver local projects.

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the Nevada County Regional Transportation Plan Update.

The Action Plan calls for an extensive list of improvements over the horizon of the RTP. As is true in other areas of the State, there is not enough existing Federal, State, or local resources to fund all of the improvements necessary.

The RTP Financial Element presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds. The RTP also discusses potential local revenue sources. Nevada County's transportation problems affect the local and regional travel demand and will require Federal, State, and local funding solutions to provide better access, mobility, and service for residents and visitors.

Estimated improvement costs for the actions recommended to meet the identified needs exceed the projected funding available for transportation projects in Nevada County. Revenue projections indicate shortfalls in funding for improvements to the following transportation system components:

- State Highways
- Regional Roadways
- Roadway Rehabilitation and Maintenance
- Rail Transportation

Air Quality

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as a "non-attainment" area under the Federal 8-hour ozone national air quality standard. The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases, and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. The EPA uses the average of the annual fourth highest 8-hour daily maximum concentrations of ozone from each of the last three years of air quality monitoring data to determine a violation of the ozone standard.

Isolated rural non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation project. The "Conformity" finding must show that the project, along with all of the regionally significant Federal and non-Federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the severity of NAAQS violations, or delay timely attainment.

To ensure the coordination of transportation planning and air quality efforts a Memorandum of Agreement was developed to identify the interagency coordination process and the responsibilities of the agencies involved. Through this process the Western Nevada County Conformity Working Group was established. This group is made up of representatives from the Nevada County Transportation Commission, Northern Sierra Air Quality Management District, Caltrans, California Air Resources Board, U.S. Environmental Protection Agency, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Non-attainment areas are also required to prepare and submit a SIP no later than three years after the date of designation. The SIP is an air quality plan developed by the California Air Resources Board, in cooperation with local air districts, to attain and maintain Federal Clean Air Act Standards. The SIP for western Nevada County will identify all sources of emissions of pollutants that exceed federal standards in the non-attainment area and detail the strategies the area will utilize to meet the NAAQS. The SIP for our region will be incorporated into a statewide SIP that will outline the measures that the state will take in order to improve air quality in non-attainment areas.

The Northern Sierra Air Quality Management District (NSAQMD) is working in conjunction with the NCTC and California Air Resources Board to prepare an air quality attainment plan for western Nevada County. NSAQMD is charged with the responsibility to attain and maintain the state and federal ambient air quality standards, and depend upon local ordinances and/or public education and voluntary programs to prevent the deterioration of ambient air quality.

The RTP seeks to reduce air quality issues associated with future planned growth by increasing the efficiency of the transportation system and increasing alternative transportation options. Transportation control measures applicable to Nevada County are discussed in the TSM/TDM section of this report.

- **Coordination of Land Use, Air Quality, and Transportation Planning**

Land use planning is a major element of providing effective transportation, particularly in light of the projected increase in population, housing and employment needs, which can be expected in the

future. Transportation corridors and right-of-way must be protected through the General Plan and zoning processes. In addition, land use decisions and policies on local and regional transportation alternatives can affect the region's air quality. In order to ensure coordination of land use, air quality, and transportation planning a Technical Advisory Committee (TAC) made up of representatives from the local city and county public works, planning departments, Caltrans, and NCTC meet monthly to review and discuss transportation and land use issues. The TAC also coordinates the land use data sets and forecasts developed for the update of the NCTC traffic model. Continued coordination between land use and transportation planning will result in more efficient use of the existing transportation system, and will help to mitigate both traffic and air quality impacts.

- **Providing and Maintaining a Transportation System that Enhances Safety, the Efficient Movement of all People, Goods, Services, and Information, and Environmental Quality.**

Needs contained in this update are a result of past trends and future trend forecasts. Past trends indicate that Nevada County has experienced a high population growth rate. According to the California State Department of Finance population forecasts, a moderately high growth rate is expected to continue. In order to adequately accommodate future travel demand associated with the planned growth for Nevada County, improvements to the transportation system are needed.

One of the big challenges that Nevada County will face over the coming years will be the increasing need to continue to provide transportation services for elderly persons, especially those who are in the potentially frail elderly population.

- **Support New Technologies**

As new technologies come on line, it is important to establish a base level of research and development in the region to determine how new technology can be appropriately applied to the transportation issues that exist in Nevada County. For example the expansion of broadband services into rural areas of Nevada County could make telecommuting a feasible alternative to the automobile for those that otherwise have to travel a long distance to work. It also has the potential to reduce additional trips by providing the residents with ability to use E-Government, shop online, or even take educational classes online.

In 2002, NCTC participated in the development of the *Tahoe Gateway Counties Intelligent Transportation Systems Deployment Plan* for the counties of Nevada, El Dorado, Placer, and Sierra. Intelligent Transportation Systems (ITS) involves the integration of communication and information technologies into the transportation system. The installation of dynamic message signs, highway advisory radio, 511 traveler information, and internet updates can provide travelers with real-time information regarding roadway conditions allowing them to make informed decisions regarding when to travel. A long-term strategy for monitoring the location of fixed route transit vehicles en-route between stops and relaying the information to waiting passengers with dynamic message signs could be accomplished through the implementation of automatic vehicle location and identification systems. These are only a couple of examples of ITS applications that could be implemented in Nevada County.

Regions that do not recognize the importance of utilizing technological innovation will have fewer funding and improvement options than those that keep pace with advanced transportation opportunities.

GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND POLICIES

An important element of the regional transportation planning process is the development of valid and appropriate goals, objectives, performance measures, and policies. The RTP Guidelines define goals, objectives, performance measures, and policies as follows:

- A **goal** is general in nature and characterized by a sense of timelessness. It is something desirable to work toward, the end result which effort is directed.

- An **objective** is a measurable point to be attained. They are capable of being quantified and realistically attained considering probable funding and political constraints. Objectives represent levels of achievement in movement toward a goal. Objectives are linked to the short-range (10 year) and long-range (20 year) transportation implementation goals listed below.

- The scale by which the attainment of an objective is measured is defined as a **performance measure**. Performance measurement involves examining the performance of the existing system, as well as, forecasting the performance of the future planned system. By examining the performance of the existing system over time, the NCTC can monitor trends and identify regional transportation needs that may be considered when updating the RTP. The purpose of performance measurements is to clarify the link between transportation decisions and eventual outcomes, thereby improving the discussion of planning options and communication with the general public. In addition, they can assist in determining which improvements provide the best means for maximizing the system's performance within the given budget and other constraints.

- A **policy** is a direction statement that guides decisions with specific actions.

Goal **1.0** **Provide for the safe and efficient movement of all people, goods, services, and information.**

Objective 1.A Program improvements to the transportation system which: (Short-range)

- Reduce accident rates. ***Performance Measure:*** **State and local accident statistics for Nevada County.**
- Reduce travel time required for the movement of persons, goods, and information. ***Performance Measure:*** **NCTC Traffic Model travel time outputs.**
- Maintain levels of service adopted by local jurisdictions. ***Performance Measure:*** **Freeway segment directional capacities compared with peak hour directional volumes. Level of Service on local roadways will be determined in specific traffic studies.**
- Support the policies of the local general plans. ***Performance Measure:*** **Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.**
- Improve the provision of, and accessibility to, traveler information systems. ***Performance Measure:*** **Expansion of broadband services, implementation of related ITS elements, and enhanced 511 coverage for Nevada County.**

Policies 1.1 Transportation facilities should be compatible with adjacent land uses.

1.2 Construction of additional streets and roads with public funds should be secondary to improving, maintaining, and realigning the existing streets and roads.

1.3 Private development/activities should be required to mitigate their impact on public transportation facilities.

1.4 Work with both the public and private sectors to enhance transit, ridesharing, telecommuting, and other means of increasing vehicle occupancy and reducing congestion on the regional roadway network.

1.5 Program improvements that support the planned development of the region in a coordinated manner within the framework of the local general plans.

Goal 2.0 Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.

Objective 2.A Development of the transportation system should be consistent with management and conservation strategies of regional resources contained in the General Plans. (Long-Range) ***Performance Measure:*** **Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.**

Policies 2.1 Establish and protect "scenic highways" in accordance with local general plans.

2.2 The adverse environmental impacts of each transportation improvement should be fully analyzed prior to implementation, and either totally avoided or mitigated to a level of insignificance as defined under CEQA or a statement of overriding considerations approved.

2.3 Assist the Northern Sierra Air Quality Management District with the development of transportation control measures that will be needed to meet the required emission reductions of the California Clean Air Act.

2.4 Assist in the implementation of transportation control measures as requested by the cities of Grass Valley and Nevada City, the Town of Truckee, and Nevada County.

Goal 3.0 Develop an economically feasible transportation system.

Objectives 3.A Minimize the capital costs of transportation improvements and operating costs of transit services. (Short-range) ***Performance Measure:*** **When planning transportation improvements, analyze cost effectiveness of alternatives. Monitor transit statistics and recommend implementation measures to reduce operating costs.**

3.B User charges should recover as much of the cost as possible and still provide the service. (Short-range) ***Performance Measure:*** **Monitor and update the Regional Transportation Mitigation Fee Capital Improvement Program as needed. Monitor transit system farebox recovery ratios.**

Policies 3.1 Support innovative alternative transportation improvements that provide equivalent solutions or benefits at a reduced cost compared to accepted standard improvements.

3.2 Seek and develop alternative funding sources for transportation improvements.

3.3 Require new development and private sector activities to fully mitigate their impacts to the transportation system through the provision of streets and roads, transit, pedestrian, and bicycle facilities as planned by local agencies.

3.4 Encourage local governments to use their traffic fines and forfeitures as a match to Surface Transportation Program funds by awarding additional points to the score of proposed projects that have local matching funds.

3.5 Transit and paratransit operations should strive to achieve a goal of 16 % farebox return (percent of total operating expense offset by fares collected), and should seek to achieve a higher percentage whenever possible.

3.6 Support federal legislation increasing funds available for transit system operating expenses by formal resolution and petitioning local representatives in Congress.

3.7 Co-sponsor, with cities, town, and county, a local initiative to increase revenues for the development of a balanced transportation system that reflects the goals of the region.

3.8 Encourage responsible agencies to consider formation of assessment districts for assisting in the financing of projects and programs included in the Regional Transportation Plan, when feasible.

3.9 Facilitate the equitable distribution of Surface Transportation Program funds among the County of Nevada, Town of Truckee, and cities of Grass Valley and Nevada City.

3.10 The fares on all public transportation systems should be set to minimize the subsidy per ride, provided the amount of the fare does not cause major reductions in ridership.

3.11 Support state budget appropriations consistent with the adopted Nevada County Regional Transportation Improvement Program.

3.12 Support continued return of fair share of motor vehicle fuel taxes to local agencies in Nevada County.

3.13 It is the policy of the Nevada County Transportation Commission to withhold Transportation Development Act fund allocations to a local entity, if the entity's proposed expenditures are not in conformity with the Regional Transportation Plan.

Goal 4.0 Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

Objectives 4.A Reduce dependence on the automobile. (Short-range) ***Performance Measure:*** **The number of pedestrian and bikeway projects implemented, transit ridership statistics, Census Journey-to-Work Mode Split Data, and the number of broadband related transactions that reduce trips.**

4.B Emphasize mass transit, ridesharing, telecommuting, and pedestrian and bicycle travel as alternatives to the automobile. (Short-range) ***Performance Measure:*** **Develop and conduct a program to inform the public about alternative forms of transportation utilizing the NCTC website.**

4.C Program those improvements to the streets and road system that are appropriate with the local general plans. (Long-term) ***Performance Measure:*** **Transportation improvements will be reviewed to ensure consistency with**

the goals, objectives, and policies of adopted General Plans.

Policies

4.1 Existing general aviation facilities should be maintained and improved. Participate with the State in development of the California Aviation System Plan as a means of planning for future development of aviation facilities.

4.2 Encourage increased passenger service on existing rail lines by participation in regional rail studies and seeking improvements to existing rail transportation facilities within the County.

4.3 Encourage improved pedestrian facilities in high density areas.

4.4 Continue public participation processes to determine the need for new and enhanced transportation facilities.

4.5 Encourage transit services along the Highway 49 Corridor as recommended in the *Nevada County Corridor Management and Rail Feasibility* studies.

4.6 General public transportation services should be maintained and improved within Grass Valley, and between Grass Valley and Nevada City.

4.7 Specialized transportation services directed for the elderly and handicapped should be maintained and improved in Nevada County.

4.8 Coordinate with local transportation management associations and other appropriate agencies to improve existing Transportation System Management and Transportation Demand Management Programs.

4.9 Annually adopt "Unmet Transit Needs Findings" in accordance with Section 99401.5 of the Public Utilities Code.

The objectives and policies contained under the main goals of the Regional Transportation Plan correspond with the following goals, objectives, and policies contained in the General Plans of Nevada County, Grass Valley, Nevada City, and the Town of Truckee:

RTP Goal 1.0 Provide for the safe and efficient movement of all people, goods, services, and information.

1995 Nevada County General Plan: Goal 4.1, Objective 4.1, Goal 4.2, Objective 4.2, Objective 4.11
City of Grass Valley 2020 General Plan: 2-CG, 3-CG, 4-CG, 13-CO
Nevada City General Plan 1980-2000: Circulation Objective 3, Circulation Policy 4
Town of Truckee General Plan 1995-2014: Circ 1.19, Circ 1.20, Circ. 1.4, Circ. 1.6

RTP Goal 2.0 Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.

1995 Nevada County General Plan: Goal 4.2, Goal 4.4, Objective 4.16, Policy 4.37, Policy 4.38, Policy 4.39
City of Grass Valley 2020 General Plan: 3-CG, 10-CO, 15-CP, 21-CP, 26-CP
Nevada City General Plan 1980-2000: Circulation Goal 1
Town of Truckee General Plan 1995-2014: Circ 2.3, Circ 1.16, Circ 4.5

RTP Goal 3.0 Develop an economically feasible transportation system.

1995 Nevada County General Plan: Policy 4.9, Objective 4.4, Policy 4.11, Policy 4.33, Policy 4.34
City of Grass Valley 2020 General Plan: 2-CO

Nevada City General Plan 1980-2000: Circulation Policy 5
Town of Truckee General Plan 1995-2014: Circ 1.14, Circ 1.15, Circ 3.3

RTP Goal 4.0 Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

1995 Nevada County General Plan: Objective 4.6, Objective 4.7, Goal 4.3, Objective 4.12, Policy 4.26, Policy 4.27, Policy 4.28, Objective 4.13, Policy 4.29, Objective 4.14, Objective 4.15, Policy 4.35
City of Grass Valley 2020 General Plan: 1-CG, 1-CO, 3-CO, 1-CP, 2-CP, 6-CP, 7-CP, 8-CP
Nevada City General Plan 1980-2000: Circulation Policy 1
Town of Truckee General Plan 1995-2014: Circ 1.9, Circ 3.4, Circ 3.5, Circ 3.6, Circ 4.2, Circ 5.2, Circ 5.3, Circ 5.5, Circ 5.6, Circ 7.1, Circ 8.1

IV. ACTION ELEMENT

PURPOSE

The purpose of the Action Element is to identify the short-term (2005-2015) and long-term (2016-2027) needs of the regional transportation system in Nevada County.

Each of the following components of the regional transportation system and issues are addressed individually, including:

- Regional Road Network
- Goods Movement
- Transit Services
- Non-Auto Facilities
- Intelligent Transportation Systems
- Transportation Systems Management
- Air Transportation
- Rail Transportation
- Air Quality

REGIONAL ROAD NETWORK

The network of roadways that facilitate the movement of people and goods within and through Nevada County is one of the most important components of the overall transportation system. This section of the RTP identifies the regionally significant roadways and the improvements that will be required over the horizon of the Plan. Figure 3 displays the regionally significant roads in Nevada County (See page 32). Roadways are determined to be of regional significance if they meet one or more of the following criteria:

- Roadways of statewide significance
- State or interstate highways
- Principal arterials connecting Nevada County with other regions or counties
- Rural arterials connecting two or more urbanized areas
- Roadways that provide access to significant commercial, industrial, recreational, or institutional activity centers

The network of local roadways provides access to all areas of Nevada County, and each one is an important part of Nevada County's transportation system. However, the RTP seeks to identify deficiencies and propose solutions for local roadways that are of regional significance, connecting population centers with commercial, industrial, recreational, or institutional activity centers. The roadways in Nevada County are categorized into the following classifications based on the type of use and volume of traffic:

- **Interstates and Freeways** — Limited access highways.
- **Principal Arterials** — Major roadways providing access from rural to urban areas and access to freeways.
- **Minor Arterials** — Streets providing through service to industrial and commercial areas and between cities and/or providing access to highways and freeways.

- **Major & Minor Collectors** Streets that collect traffic from local streets within residential areas.
- **Locals** Streets whose primary purpose is to provide access to individual properties.

Figure 2 displays the functional classification of roadways in Nevada County (See page 27).

Analysis of Regionally Significance Roadways

The NCTC maintains a travel demand forecasting model covering western Nevada County that includes freeways, highways, major and minor arterials, and major and minor collector roadways. The regionally significant roadways are analyzed with the traffic model based on current and on future travel demand, and provide a basis to identify potential impacts of growth. Land use data assumptions are based on the Nevada County General Plan and the General Plans of Grass Valley and Nevada City. Growth projections are based on General Plan zoning, County Assessor parcel data, and historical and projected population statistics from the California Department of Finance.

In 2004, the City of Grass Valley completed the *Street System Master Plan for the City of Grass Valley*. The purpose of this study was to examine the transportation improvement projects that will be needed during the planning period of *City of Grass Valley 2020 General Plan* and to identify funding sources.

In 2001 the NCTC, working with the Nevada County Department of Transportation and Sanitation, completed the *Brunswick Corridor Study*. The purpose of this study was to develop a specific corridor plan for Brunswick Road between the Brunswick Basin and State Route 174. As a part of this work effort, traffic conditions along the corridor were analyzed for existing and 20 year projections, and this information was used to design the ultimate configuration needed for the corridor.

In 2001 the NCTC managed a study process that defined the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identified the financial resources needed to pay for the investments. The County of Nevada and the cities of Grass Valley and Nevada City participated in these studies at both the policy and technical levels. The study resulted in the development and adoption of the Regional Transportation Mitigation Fee Program.

The Town of Truckee also maintains a travel demand forecasting model that is utilized to identify the need for potential transportation improvements in the area, based on the Town's General Plan and historical and projected growth projections. The Town of Truckee has identified the transportation improvements projects that will be required for the regionally significant roadways in the Truckee area.

Figure 2 Cover

Figure 2-1

Figure 2-2

Figure 2-3

Figure 2-4

Insert Figure 3

Insert Figure 3-1

Insert Figure 3-2

State Highways

State highways in Nevada County are the backbone of the region's roadway system, connecting the major population centers within the county, and connecting the county with other regions throughout the State. All of the State highways in Nevada County are regionally significant. The State highways in Nevada County include:

Interstate 80 (I-80) is a major route on the Federal Interstate System that runs in California from its western limits in the San Francisco Bay area to the eastern California/Nevada Border. It continues eastward outside of California toward the northeastern United States and terminates in New Jersey. As one of three major all-weather trans-Sierra routes in the winter (others include U.S. 50 and California 88), Interstate 80 is always busy with commercial traffic, tourists, skiers, commuters, and others. Interstate 80 crosses the Donner Summit, one of the highest points on the freeway, and then descends into Truckee, a gateway to scenic Lake Tahoe. Passing by a few small towns, Interstate 80 enters Nevada just east of Farad.

State Route 49 (SR 49) runs north/south and is a principal arterial for Nevada County, connecting the cities of Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County's freight and lumber traffic and also provides access to recreational attractions. To the west of Nevada City, this route continues in a northerly direction to the Nevada/Yuba County line.

State Route 20 (SR 20) connects the City of Grass Valley with Yuba County to the west of Grass Valley and continues north of Nevada City, connecting to I-80. The highway portion between SR 20 to the west of Grass Valley and SR 20 north of Nevada City is signed as a shared SR 49/20, and is a principal arterial. This shared route is named the "Golden Center Freeway" between Route 49 south of Grass Valley and SR 20 north of Nevada City.

State Route 174 (SR 174) extends approximately 13 miles northward from I-80 near Colfax in Placer County to SR 20 in Grass Valley. This route is a minor arterial and serves mostly local rural residential populations and some regional traffic traveling to the Grass Valley or Nevada City area. SR 174 is also an alternative connection to I-80 for residents in the Grass Valley and Nevada City area.

State Route 89 (SR 89) is a north/south route, which serves as a key facility for interregional travel. From I-80 in Truckee heading south, SR 89 provides the primary access to the Tahoe Basin's North/West Shore, as well as Squaw Valley and Alpine Meadows. SR 89 to the north of I-80 provides a connection to Sierra County.

State Route 267 (SR 267) is a north/south undivided two-lane conventional highway 12.69 miles in length that connects I-80 near Truckee to SR 28 near Kings Beach in Placer County. The route is of local and regional significance providing access to residential, commercial, industrial, and recreational land uses and serves inter-regional, local commuter, and recreational traffic traveling between the Tahoe Basin, Martis Valley, Truckee, and I-80.

Interregional Road System "High Emphasis Routes" and "Focus Routes"

There are currently eighty-seven Interregional Road System (IRRS) routes in State statute. They are a subset of the existing two hundred forty-nine State highway routes that serve the interregional movement of people and goods. Due to the large number of routes and capacity improvements needed on the IRRS, the 1990 IRRS Plan identified thirteen of eighty-seven routes as being most critical IRRS routes, and identified them by the term "High Emphasis Routes". The term "High Emphasis," and the priority for improvements to routes in that category, continue as a basis for common and understood usage between Caltrans and regional agencies. Interstate 80 is classified as a "High Emphasis" route and has been designated by Caltrans in the Interregional Transportation

Strategic Plan as a gateway.

The IRRS and High Emphasis Routes are incorporated into both Caltrans system planning for long-range highway improvements, and in most regional transportation plans and planning processes. Focus Routes are a subset of the thirty-four High Emphasis Routes. The routes represent ten IRRS corridors that should be of the highest priority for completion to minimum facility standards in the twenty-year period. Completion of the Focus Routes to minimum facility standards will assure a statewide trunk system is complete for higher volume interregional trip movements. Focus Routes will serve as a system of high volume primary arteries to which lower volume and facility standard State highway routes can connect for purposes of longer interregional trips and access into statewide gateways. Focus Routes assure rural connectivity for the north state, and otherwise connect the fastest growing urbanized areas and urban centers to a trunk system. State Routes 20 and 49 are both designated as High Emphasis and Focus Routes in the interregional road system.

REGIONAL ROADWAY ACTION PLAN

REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) PRIORITIES

The projects identified in the RTP below demonstrate consistency with the projects included in regions RTIP and Caltrans Interregional Transportation Improvement Program (ITIP).

WESTERN NEVADA COUNTY

- **Dorsey Drive Interchange**

  Need and Purpose

  This project when completed will provide a direct access to high use sites, specifically the Nevada County Sierra College Campus, Sierra Nevada Memorial Hospital, and the Litton Hill development. Currently, the above mentioned sites gain access from SR 20 using the existing adjacent interchanges at Brunswick Road and Idaho-Maryland/East Main Street compounding congestion experienced from the retail/commercial developments at these locations. This project will benefit the overall regional circulation by helping to alleviate congestion in the Brunswick Basin and East Main Street corridors and reduce the delay time at these existing adjacent interchanges.

  Current and Future Regional Improvement Program (RIP)/Local Funding

  NCTC currently has $1.2 million programmed to complete the Project Approval and Environmental Documentation (PA/ED) phase of this project, $2.4 million for preparation of Plans, Specifications, and Estimates (PS&E), $6.0 million for Right-of-Way (R/W) Capital, $1.1 million for R/W Support, $6.1 million for Construction Capital, $1.5 million for Construction Support. The currently programmed revenues include $16.8 million of RIP funds and $1.5 million of Regional Transportation Mitigation Fee Program funds.

  The NCTC views this project as one of its top priorities and wishes to see this project advanced as fast as possible. The NCTC has worked with Nevada City, Grass Valley, and Nevada County to adopt a Regional Transportation Mitigation Fee Program that will provide local funding for this project. Caltrans is scheduled to complete the PA/ED by July of 2006 and will then begin working on the PS&E and R/W components. Given the current shortfall of programmed construction capital dollars for this project, the NCTC is currently exploring opportunities with Caltrans to phase the construction of this project. Current estimates place the construction cost at approximately $16.9 million. These estimates indicate a shortfall of approximately $9.5 million in the construction capital component of this project. Programming additional construction capital dollars to facilitate completion of this project continues to be one of the highest priorities in future STIP cycles.

- **State Route 49 Widening - Placer County to Grass Valley**

Need and Purpose

SR 49 is the major roadway connecting Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County and is utilized by freight and lumber traffic, commuters, and recreational traffic. Growth forecasts for the corridor indicate that traffic congestion and delays will only increase if SR 49 in Nevada County is not improved. Existing Level of Service (LOS) on this highway operates near failing at several segments during peak periods. Upgrading the existing roadway to four lanes and a continuous left-turn lane will provide adequate capacity for future traffic demand, and improve the LOS. The planned consolidation of access points into a series of frontage road systems should reduce the number of accidents and improve operational problems.

In the 2000 STIP, the California Transportation Commission made a commitment to Nevada County by approving the partnering of RTIP and ITIP funding to complete the first phase of the SR 49 widening from just south of the Bear River to Wolf-Combie Roads. This section was completed in 2004, ahead of schedule and under-budget, and has substantially reduced congestion and improved the safety along this section.

The NCTC in partnership with Caltrans has currently programmed the second phase of this project from just north of Alta Sierra Drive to just south of Wellswood Way near Grass Valley. Due to growth in the area and several residential communities in the immediate vicinity, this segment experiences operational problems during the peak period and a number of serious accidents have occurred as motorists attempt to enter onto the highway.

As a part of this project, the intersection of La Barr Meadows Road and SR 49 will be relocated to the south and signalized. Highway widening from two to four through lanes to the north and south of the new intersection and turn pockets at the intersection are needed to provide adequate storage and provide for left turn movements. The numerous driveways and private road accesses to the highway will be consolidated by a system of frontage roads that will provide greatly improved access to the highway at the new signalized intersection and improve safety. This project will also provide improved access to SR 49 for emergency vehicles from the fire station south of La Barr Meadows Road that are often delayed for significant periods of time attempting to enter the highway.

This route is listed as a high travel priority route in the District 3 System Management Plan, and high priority routes are targeted for improvements in order to reduce deficiencies of greatest concern. Caltrans SR 49 Concept Report also identifies the widening of SR 49 as a priority project and had a goal to have the project completed by 2010.

SR 49 is classified as a Federal Aid Primary (FAP) route, and it is part of the Interregional Road System (IRRS) established by Senate Bill 300 (Kopp 1989) and is designated as a High Emphasis and Focus Route in the interregional road system.

Current and Future RIP/Interregional Improvement Program (IIP) Funding

The NCTC in partnership with Caltrans has $9.05 million of RIP funding combined with a $9.05 million of ITIP match from Caltrans programmed for this phase of the SR 49 widening and breaks down as follows: $3.5 million programmed to complete the Project Approval and Environmental Documentation (PA/ED), $1.3 million for preparation of Plans, Specifications, and Estimates (PS&E), $7.0 million for Right-of-Way (R/W), $0.6 million for R/W support, $4.7 million for Construction Capital, and $1.0 million for Construction Support.

Subsequent phases of this project continue to be one of the highest priorities in future STIP cycles and NCTC plans to continue to partner funding with Caltrans.

EASTERN NEVADA COUNTY

- **SR 89 South - Widening at the Union Pacific Railroad Grade Separation**

  Need and Purpose

  The current Union Pacific Railroad (UPRR) underpass structure on SR 89 South has long been the subject of discussion regarding its inadequacies. Known locally as the "Mousehole," this undercrossing predates much of the development of the region, including Squaw Valley and Alpine Meadows ski areas. These resorts gain their major access through the structure. The current two-lane roadway cross-section, approximately 25 feet in width, creates a "bottleneck" for regional traffic, which is most evident at peak periods.

  Traffic analysis has indicated that the widening of the "Mousehole" is necessary to ensure that SR 89 can accommodate future traffic volumes. In addition, the SR 89 corridor is also a travel route for bicyclists and pedestrians. The development of an important shopping district to the north (Crossroads Center), coupled by the development of a housing complex to the south, has generated a demand for non-motorized travel through the structure. Pedestrians and cyclists must now walk along the very edge of the travel lane. Pedestrians are often observed to run through the underpass to avoid conflict with cars. They have even been observed climbing up and over the 25-foot high railroad embankment and crossing the tracks at-grade rather than risk walking through the underpass. Additionally, traffic is observed to slow down and even stop in some instances when pedestrians and cyclists are passing through the underpass, causing both a reduction in roadway capacity and an unsafe condition.

  Presently oversized loads cannot pass through the "Mousehole". Overhead clearance is restricted to 14 foot 6 inches northbound and 15 foot southbound. Oversized loads traveling on SR 89 between Tahoe City and I-80 must use West River Street and the at-grade railroad crossing at Bridge Street in downtown Truckee. This re-routing mixes these large trucks with passenger vehicles in an already-congested area, further exacerbating traffic delays downtown and at the grade crossing.

  Current and Future RTIP/STIP/ITIP Funding

  The NCTC has $498,000 of RTIP funds programmed for the completion of the Project Approval and Environmental Documentation (PA/ED). The Town of Truckee is the lead agency for this project and had been unable to receive an allocation of the funds for PA/ED from the California Transportation Commission since the time it was programmed in the 2002 STIP cycle, due to the previous allocation freeze. The freeze had been lifted at the time of this report and an allocation of the $498,000 is anticipated. Also as part of the Federal Surface Transportation Reauthorization bill, SAFETEA-LU, the Town of Truckee received a Federal Earmark in the amount of $2,827,744 for widening the SR 89 underpass. These funds will be utilized by the Town of Truckee to complete the sequential design and right-of-way work required to advance the project to ready to list. The total estimated cost of this improvement is approximately $13,000,000 million in 2005 dollars.

REGIONAL ROAD NETWORK CAPITAL IMPROVEMENTS

Table 6 (Page 39) lists the recommended "Financially Constrained" capital improvements, identified through previous and recent analysis, to the regional road network for western and eastern Nevada County and identifies the funding sources. Table 7 (Page 43) lists the "Financially Unconstrained" capital improvements for western and eastern Nevada County that did not have a funding source identified for the capital improvement at the time this report was developed, or are improvements that are anticipated to be funded by future development. In the case of improvement projects identified as a "Developer Funded" in Table 7, a development may be conditioned to pay its fair

share towards the accelerated improvement, or if no other developments in the area can be shown to have a nexus, the development may have to pay the full cost.

Projects may be added, deleted, or revised based on changes in land use, implementation of Transportation Demand Management or Transportation Systems Management strategies, or changes in transportation technology. The projects included do represent an improvement scenario that will yield satisfactory traffic operations within the region. Additional projects of regional significance identified in the future will be amended into the Plan if required for funding and/or included in future updates of the Regional Transportation Plan, as well as, in local improvement programs of the City of Grass Valley, Nevada City, Town of Truckee, and Nevada County as appropriate.

TABLE 6

WESTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short-term improvements are those that can reasonably be expected to be funded prior to 2015.

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
Brunswick Rd.	Sutton Way	Intersection Improvement	$281	RTMF
E. Main St.	SR 49/Idaho-Maryland Rd./E. Main St.	Intersection Improvements	$700	RTMF
SR 20	Dorsey Dr.	Construct Interchange/Phase 1	16,800 1,500 $18,300	RIP, RTMF
SR 49	Lady Jane Rd. to Norambagua Ln.	Signal at La Barr Meadows & Channelization	9,050 9,050 $18,100	RIP, IIP
McCourtney Rd.	Brighton St.	Signal & Rechannel	$137	GV Dev. Fee
Sierra College Dr.	Ridge Rd.	Signal	$200	GV Dev. Fee
SR 174	Ophir St.	Signal & Channel	$125	GV Dev. Fee
SR 20-49 Golden Center Freeway	Idaho-Maryland Rd./SR 20 Ramps/Railroad Ave.	Signal & Channel	$300	GV Dev. Fee
SR 20	EB Ramp at McCourtney Rd.	Signal & Channel	$250	GV Dev. Fee
W. Main St.	Church St.	Signal	$150	GV Dev. Fee
Magnolia Rd.	Kingston Lane	Left turn pocket	$250	Nev. Co. Dev. Fee
Pleasant Valley Rd.	Lake Wildwood Dr.	Signal & Channel	$200	Nev. Co. Dev. Fee
SR 174	Brunswick Rd.	Signal & Channel	$400	Nev. Co. Dev. Fee
Combie Rd.	SR 49 to Magnolia Rd.	Improve to 4 Lanes (plus center turn lane)	$2,100	Nev. Co. Dev. Fee
Rough & Ready Hwy.	Bitney Springs Rd. to Grass Valley City Limits	Center Turn Lane/Turn Pockets	$600	Nev. Co. DOTS
		Constrained List Western Nevada County Subtotal Short-term Improvements	$42,093	

Note: Specific funding implantation years can be found in the currently adopted expenditure plans of the Regional Transportation Mitigation Fee Program, and the specific fee programs adopted by the jurisdictions. Fee programs and expenditure plans are updated on a regular basis.

WESTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be funded prior to the year 2027

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
Brunswick Rd.	Bennett St./Greenhorn Rd.	Signal & Channel	$277	RTMF
Brunswick Rd.	Old Tunnel Rd.	Signal & Channel	$225	RTMF
Brunswick Rd.	Loma Rica Dr.	Relocate Intersection	$1,386 $1,073 $2,459	RTMF, Nev. Co. Dev. Fee
Brunswick Rd.	Dorsey Dr.	Signal & Channel	$430	RTMF
McKnight Way	Taylorville to Freeman	Widen	$393	RTMF
Mill St.	McCourtney Rd.	Roundabout	$419	RTMF
SR 20	Colfax Ave/Neal St/South Auburn Ramps	Intersection Improvements	$562	RTMF
SR 20	Gold Flat Interchange Ramps	Dual Roundabouts	$281	RTMF
SR 20	WB Ramp at Mill St.	Roundabout	$260	RTMF
SR 20	SB Ramp at Brunswick Rd.	Modify Signal & Rechannel	$337	RTMF
SR 49	McKnight Way	Dual Roundabout & Striping	$815	RTMF
Nevada City Highway	Joerschke Dr.	Signal & Channel	$169	RTMF
S. Auburn St.	Empire St.	Signal & Channel	$141	RTMF
SR 20	Dorsey Dr.	Interchange Construction Phase 2	$5,036 $4,465 $9,501	RIP, RTMF
McCourtney Rd.	Old Auburn Rd. to SR 20	Improve to 4 Lanes	$250	GV Dev. Fee
W. Main St.	Alta St.	Signal & Channel	$165	GV Dev. Fee
Pleasant Valley Rd.	Donovan Rd.	Signal & Channel	$200	Nev. Co. Dev. Fee
Pleasant Valley Rd.	Gold Country Estates Dr.	Two-Way Left Turn Lane	$200	Nev. Co. Dev. Fee
SR 49	Combie – Wolf Rd. Intersection	2nd SB Left Turn Lane, SR 49 to Combie	$500	Nev. Co. Dev. Fee
SR 49	Combie – Wolf Rd. Intersection	Extend the Right Turn Lane at Wolf Rd. & Combie Rd.	$440	Nev. Co. Dev. Fee
La Barr Meadows Rd.	McKnight Way to Dog Bar Rd.	Add 8' Pavement (Shoulder Improvement)	$1,968	Nev. Co. DOTS
Loma Rica Dr.	Brunswick Rd. to Charles Dr.	Add 8' Pavement (Shoulder Improvement)	$440	Nev. Co. DOTS
McCourtney Rd.	Indian Springs Rd. to Old Auburn Rd.	Add 8' Pavement (Shoulder Improvement)	$2,619	Nev. Co. DOTS

SR 20-49 Golden Center Freeway	SR 49/Idaho-Maryland Rd./E. Main St.	Convert Idaho-Maryland Rd./E. Main St. onramp to Collector-Distributor Rd. to Bennett off ramp and Freeway	$6,800	SHOPP
		Constrained List Western Nevada County Subtotal Long-term Improvements+	$29,851	
		Constrained List Total – Western Nevada County	$71,944	

EASTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short term improvements are those that are expected to be funded prior to 2015.

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
SR 89 South	UPRR Grade Separation "Mousehole"	Completion of the PA/ED, PS&E, and Possibly ROW. Project will provide additional capacity for vehicles and pedestrians.	$498 $2,828 $3,326	RIP, Federal Ear Mark
Bridge Street	Intersection with Donner Pass Rd.	Roundabout	2,000	Truckee Impact Fee
Bridge Street	West River St.	Roundabout	$2,000	Truckee Impact Fee
Brockway Rd.	Martis Valley Road	Roundabout	$650	Truckee Impact Fee & Developer Funded
Brockway Rd.	Reynold Way	Roundabout	$650	Truckee Impact Fee
Donner Pass Road	Along Donner Lake	Widening	$2,000	Truckee Impact Fee
Glenshire Drive	Dorchester Drive (west)	Add Turn Lanes	$150	Truckee Impact Fee
Pioneer Trail	Donner Pass Rd.	Roundabout	$1,000	Truckee Impact Fee
Pioneer Trail Extension/Bridge Street Extension	Northwoods Blvd. south of Lausanne Way & Pioneer Trail & the North End of Bridge St.	Arterial Connection between Northwoods Blvd. and Comstock Drive & Arterial Connection between the Pioneer Trail Extension and the Northern End of Bridge St.	$11,000	Traffic Impact Fee & Other Funding
SR 267	Brockway Road/Soaring Way Intersection	Roundabout	$2,000	Truckee Impact Fee
SR 89 South	Donner Pass Rd. /Frates Ln. Intersection	Roundabout	$1,560	Truckee Impact Fee
West River Street	Riverside Drive to Placer County	Add Shoulders	2,000	Truckee Impact Fee
SR 89 North	Donner Pass Rd.	Dual-Lane Roundabout	$2,000	Developer Funded
SR 89 North	Prosser Dam Rd./Alder Drive	Roundabout	$2,000	Developer Funded
		Constrained List Eastern Nevada County Subtotal Short-Term Improvements	$32,336	

EASTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that are expected to be funded prior to the year 2027

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
Glenshire Dr.	Subdivision to Brockway Rd.	Widening	$2,500	Truckee Impact Fee
I-80	Donner Pass Rd. Eastern Interchange intersection	Roundabout or Traffic Signal at both access Ramps	$2,500	Truckee Impact Fee
SR 267	I-80 WB Ramps	Roundabout	$2,000	Truckee Impact Fee
SR 267	I-80 EB Ramps	Roundabout	$2,000	Truckee Impact Fee
West River St.	McIver Crossing Intersection	Roundabout	$1,500	Truckee Impact Fee
		Constrained List Eastern Nevada County Subtotal Long-Term Improvements	$10,500	
		Constrained List Total – Eastern Nevada County	**$42,836**	
		TABLE 6 – WESTERN AND EASTERN NEVADA COUNTY CONSTRAINED TOTAL	**$114,780**	

TABLE 7

WESTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2015

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
Centennial Dr.	Bennett St.	Centennial Connector Rd.	$1,000	Developer Funded
Dorsey Dr.	Dorsey Dr. to Brunswick Rd.	Extension of Dorsey Dr.	$750	Developer Funded
Dorsey Dr.	SR 49/20 to Sutton Way	Widen to 4 Lanes	$1,000	Developer Funded
Dorsey Dr.	Sutton Way to Brunswick Rd.	Widen to 4 Lanes	$2,500	Developer Funded
Dorsey Dr.	Sutton Way	Signal & Channel	$150	Developer Funded
Ridge Rd.	Rough & Ready Hwy. to Alta St.	Signal or Roundabout	$600.	Developer Funded
SR 49	Crestview Dr. Intersection	Construct Interchange & North/South Connector Road	$55,000	Developer Funded
Hughes Rd.	Ridge Rd. to Main. St.	Add 8’ Pavement	$912	To Be Determined (TBD)
LaBarr Meadows Rd.	McKnight Way to Dog Bar Rd.	Add 8’ Pavement	$1,968	TBD
McCourtney Rd.	Indian Springs Rd. to Old Auburn Rd.	Add 8’ Pavement	$2,619	TBD
Nevada City Highway	Banner-Lava Cap Rd.	Intersection Improvements	$505	TBD
Ridge Rd.	Alta St.	Signal	$200	TBD
SR 174	Brunswick Rd.	Signal	$150	TBD
Zion St.	Ridge Rd.	Intersection Improvements	$150	TBD
		Unconstrained List Western Nevada County Subtotal Short-Term Improvements	$67,504	

WESTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2027

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
SR 20	Pleasant Valley Rd. to SR 49	Improve to 4 Lanes	5,700 5,700 $11,400	RIP, IIP
SR 49	Combie to McKnight	Improve to 4 Lanes (Plus Continuous Left Turn Lane)	36,000 36,000 $72,000	RIP, IIP
W. Main St.	School St.	Intersection Improvement	$150	TBD
W. Main St.	Squirrel St.	Intersection Improvement	$150	TBD
W. Main St.	One-Way Couplet (Main/Neal St. or Main/Richardson St.)	Couplet	$2,500	TBD
SR 49/20	Empire (Interchange)	Increase Capacity	$5,500	TBD
		Unconstrained List Western Nevada County Subtotal Long-Term Improvements	$91,700	
		Unconstrained List Total – Western Nevada Co.	$159,204	

EASTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2015

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
East River RR Under crossing	Connecting Brockway Rd. to East River St. and Glenshire Dr.	Connection and Railroad Undercrossing Between Railyard Master Plan area and East River St. Including upgrading of East River St. and possible closure of Bridge St. Railroad Crossing	$6,000	Developer Funded & Truckee Impact Fee
Glenshire Dr.	Realignment (Donner Pass Rd./Glenshire Dr.)	Connection Between the Western End of Glenshire Dr. and Church St.	$3,000	Truckee Impact Fee & Other
I-80/Donner Pass Rd. (Western Interchange)	Cold Stream Rd. Intersection	Intersection Improvements at WB Ramps & Roundabout at EB Ramps	$2,000	Developer Funded
I-80	Truckee River Bridge to the Nevada State Line	"Truckee River Canyon Project" improves narrow winding section, adds truck climbing lane, and new pavement	$205,000	SHOPP
SR 89	UPRR Grade Separation "Mousehole"	Construction of Improvement. Provide additional capacity for vehicles and pedestrians	$9,674	TBD
		Unconstrained List Eastern Nevada County Subtotal Short-Term Improvements	$225,674	

EASTERN NEVADA COUNTY
UNCONSTRAINED (UNFUNDED) REGIONAL TRANSPORTATION PROJECTS LIST

LONG TERM IMPROVEMENTS
Long-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2027

Facility	Segment	Improvement	Estimated Cost ($K)	Funding Source
SR 267	Between Placer County and Brockway Rd.	Additional NB and SB Through Lanes	$1,500	Truckee Impact Fee & Other
		Unconstrained List Eastern Nevada County Subtotal Long-Term Improvements	$1,500	
		Unconstrained List Total –Eastern Nevada Co.	$227,174	
		TABLE 7 - WESTERN AND EASTERN NEVADA COUNTY UNCONSTRAINED TOTAL	$386,378	

Table 7 above, identifies a total unfunded deficit for State highway and regional projects for both western and eastern Nevada County in the amount $386,378,000. However this total deficit amount includes $315,700,000 worth of projects that are anticipated to be the responsibility of future development and also Caltrans through the State Highway Operation and Protection Program and Interregionl Improvement Program partnerships with NCTC. Therefore, the deficit that NCTC would be responsible for is actually $70,678,000 for State highway and regional projects in western and eastern Nevada County. The deficit over the planning period for western Nevada County totals $56,504,000 and the deficit for eastern Nevada County totals $14,174,000.

During the last two decades, gasoline tax revenues have not kept pace with either inflation or need. Existing revenue sources are not sufficient to offset these loses. Significant additional revenues over and above the existing revenues are needed. The NCTC's overall funding strategy to try and address the identified funding deficit is as follows:

- Aggressively Pursue State and Federal Funding – The NCTC and its member agencies should continue to pursue increased State funding for Nevada County transportation projects and road maintenance. Continue participation in State level organizations to ensure that Proposition 42 revenue transfers to the State Highway Account are not suspended and used in the State General Fund. The NCTC should also continue to pursue the possibility of federal "earmarks" for Nevada County transportation projects.

- Consider Pursuing a ½ Cent Sales Tax for Various Transportation Modes – The NCTC and its member jurisdictions should look into the viability of pursuing a ½ cent sales tax for various transportation modes. In November 2005, NCTC circulated a Request for Proposals for interested consulting firms who would conduct a public opinion survey to determine the type of projects voters would be willing to support and to determine the overall level of support. If a sales tax is supported by the residents of Nevada County, a ballot measure, "contract" with local voters, would be developed that identified the specific transportation projects desired to be funded by the voters over a specified period of time with a ½ cent sales tax increase. It is estimated that an additional $190,600,000 could be generated for various types of transportation projects if a ½ cent sales tax was in place over the 22-year period of the RTP.

- Use CEQA Mitigation to Construct Needed Improvements – Table 7 contains a list of needed transportation projects that are currently not funded. If new development projects are required to construct specific improvements in relation to their project, the overall regional road funding deficit can be reduced.

- Pursue Low-Cost Innovations and New Technological Solutions – The NCTC should work with Caltrans and local agencies to investigate opportunities to use new technologies and apply innovative approaches that can solve traffic congestion and safety problems with lower cost solutions. Examples include coordinated traffic signal timing, changeable message signs, and the expansion of broadband services.

GOODS MOVEMENT

Goods movement covers the transportation methods by which freight and commodities are transported into and out of Nevada County. Goods movement is critical to the continued economic health of Nevada County and the State of California. Maintaining an efficient transportation system that provides for effective goods movement allows local business to transport goods to within Nevada County, as well as, to markets outside of the area and allows them to bring in materials and finished products into the area.

Trucking

Trucks account for the majority of goods movement in Nevada County. It provides end delivery service for every other long-haul mode. The common practice of "just in time delivery" has made trucking the freight mode of choice. Fast delivery reduces on-site warehousing and allows retail outlets and other businesses to cut back on their inventory. Trucking has outperformed rail for this part of the market, because trucks can make faster deliveries directly to businesses. In Nevada County Interstate 80 and State Routes 20, 49, 174, and 89 are all vital good movement facilities. Improvements to these facilities will be critical to ensure effective goods movement within Nevada County and across the State of California.

Package Delivery

Over the years package delivery and courier services have become established in Nevada County. These services are responding to a need to move small parcels around the urban area and to outlying areas of the county. Fast delivery time is often very important in the decision to use these services.

Air Freight

The Nevada County Air Park and the Truckee Tahoe Airport do not serve as hubs for air cargo service. The Chico, Redding, Sacramento, and Reno Airport facilities provide a full compliment of cargo services to the northern California area.

Freight Movement by Railroad

Union Pacific Railroad owns and operates tracks that follow Interstate 80 along the southern border of Nevada County. Although the Union Pacific Railroad lines run through a portion of eastern Nevada County there are currently no rail freight loading and unloading opportunities in Nevada County. As congestion increases on Interstate 80 in the future, the provision of rail freight loading and unloading facilities in eastern Nevada County will need to be considered.

GOODS MOVEMENT NEEDS ASSESSMENT

Traffic Congestion

Whether products are shipped by rail, ship, air, or truck, regional highways and local roads are very likely to be used for some part of the trip. Freight movement by truck suffers from congestion on the roadway system, which delays deliveries and therefore may cause some economic loss to shippers. Truck traffic mixing with automobile traffic contributes to congestion, and can pose safety and operational problems on the freeways. Traffic congestion on the Interstate and State Highways in Nevada County affects the timely flow of goods, and increases in truck traffic during commute hours

exacerbates peak period traffic congestion. Therefore, securing State transportation funding for the planned improvements to these facilities in Nevada County will continue to be a priority.

GOODS MOVEMENT ACTION PLAN

Short-Term

1. Maximize the use of the existing goods movement infrastructure of the region, through the implementation of Transportation Systems Management strategies. (*Caltrans, jurisdictions*)

2. Protect the transportation infrastructure from deterioration through on going maintenance and rehabilitation. (*Caltrans, jurisdictions*)

3. Review transportation projects to ensure that they minimize conflicts between trucks and other vehicles. (*NCTC, Caltrans, jurisdictions*)

4. Implement transportation improvements that will maintain an acceptable level of service. (*NCTC, Caltrans, jurisdictions*)

Long-Term

1. Support the improvement or increase in goods movement modes available to the county. (*NCTC, Caltrans, jurisdictions*)

TRANSIT SERVICES

The NCTC is the regional planning agency responsible for allocating Transportation Development Act (TDA) funds, conducting the annual unmet transit needs process, and preparation of Transit Development Plans. Transit Development Plans are generally regarded as the primary short-term planning guideposts for smaller transit systems, and set a policy framework by which the County's mobility needs are identified and met.

The demand for transit and paratransit services is expected to increase. As demand increases it will be important for the growth of these services to be monitored and measures taken to ensure funding is available to meet transit needs that are determined to be reasonable to meet. Additional transit facilities and services will need to be provided, where feasible, in key locations in the County to accommodate as much of the travel demand as possible. Transit services must be affordable, comfortable, convenient, and reliable. The benefits of increased transit ridership are reduced congestion and improved air quality.

WESTERN NEVADA COUNTY

Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County. The Transit Services Commission (TSC) is a seven-member policy board that has the following powers and duties:

- To establish fares.
- Approve level of service.
- Monitor public response.
- Provided recommendation on proposed purchase of additional vehicles.
- Oversee on a regular basis and advise as necessary on the daily operations of the transit system, in conjunction with public response, to make the proper adjustments in the program in order to serve the public with maximum efficiency and service.
- Review and make recommendations to TSD staff regarding the annual budgets for transit and paratransit operations.
- To recommend to the County to apply for grants for usual operation and/or for demonstration or study projects.

The two public transit systems operating in western Nevada County are as follows:

- **Gold Country Stage** is the fixed route system serving the cities of Grass Valley and Nevada City, the adjacent unincorporated sections of the County, and portions of Placer County.
- **Gold Country Telecare, Inc.** is a nonprofit organization contracted with by the County to provide demand response paratransit service for disabled residents in western Nevada County. Telecare provides both local trips and out-of-county non-emergency medical trips.

Fixed Route Transit Service

The following descriptions summarize the fixed route services available.

Gold Country Stage

The Gold Country Stage is a fixed route transit system that connects population, commercial, and employment centers throughout western Nevada County. The system was formed through a Joint Powers Agreement (JPA) between the two incorporated cities and the County of Nevada. The Nevada County Transit Services Division operates the service utilizing a fleet of 15 buses and six support vehicles. Gold Country Stage's entire fleet of buses are wheelchair accessible, equipped with wheelchair lifts, and bike racks.

Gold Country Stage operates a total of eleven routes that serve the Nevada City/Grass Valley area, the unincorporated area of western Nevada County, and also provide regional connections to Placer County. Timed transfers can be made in Placer County at the Auburn Depot between Gold Country Stage Route 5/5X, Placer County Transit, Auburn Transit, and Amtrak Capital Corridor trains. The Gold Country Stage Route 5X express bus feeder service was implemented in June of 2005 through an agreement with the Capital Corridor Joint Powers Authority and Amtrak to fund this express connection to the Amtrak Capital Corridor trains in Auburn.

Several transfer points exist in the local service area, including: the Fowler Center, Nevada City Highway/Dorsey Drive, the National Hotel on Broad Street in Nevada City, and at the intersection of Church and Neal Streets in Grass Valley. Gold Country Stage buses will pick-up and drop-off passengers at signed bus stops in the "urban" areas, although flag-stops are allowed in the rural areas. Service is provided on weekdays from 7:00 A.M. to 6:30 P.M., and on Saturdays from 9:30 A.M. to 5:30 P.M. Limited service is provided on Martin Luther King's Birthday, Presidents Day, Veterans Day, and the day after Thanksgiving. Except for Route 5X, no service is provided on Sundays, New Years Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Days and time of service are subject to change and are shown above for general information.

The fixed route system is designed on a combination of coverage and productivity goals that seek to provide the level of service that can be reasonably financially supported to each part of the service area. More frequent and direct service is provided to areas that generate higher ridership, while retaining other routes to provide coverage where needed.

Description of Gold Country Stage Routes

A description of each route follows:

Route 1 - Nevada City (Mon.-Sat.)

Route 1 provides service to downtown Grass Valley, the Fowler Center, Seven Hills, downtown Nevada City, the Nevada County Health, Education, and Welfare Center, and the Eric Rood Administrative Government Center.

Route 2 - Ridge Road (Mon.-Sat.)

Route 2 provides service to downtown Grass Valley, Nevada Union High School, Seven Hills, Pioneer Park, and downtown Nevada City.

Route 3 - Grass Valley Loop (Mon.-Sat.)

Route 3 provides service to downtown Grass Valley, the Nevada County Fairgrounds, Senior Center,

Pine Creek Center, Grass Valley (K-Mart Center), and Memorial Park.

Route 4 - Brunswick Basin (Mon.-Sat.)

Route 4 provides service to downtown Grass Valley, the Sierra College Nevada County Campus, Sierra Nevada Memorial Hospital, Glenbrook Center, Gold Country Center, and the Fowler Center.

Route 5 - Auburn via Hwy 49 (Mon.-Sat.)

Route 5 is an intercity service, linking Nevada City and Grass Valley with Auburn, via the Highway 49 Corridor. This route provides service to downtown Grass Valley, Alta Sierra, Higgins Corner, Lake of the Pines, Bear River High School, Rock Creek Plaza, and the Auburn Amtrak Depot. Route 5 passengers can transfer to and from Placer County Transit, Auburn Transit, and Amtrak/Capitol Corridor trains at the Auburn Amtrak Depot.

Route 5X - Hwy 49 Express (Mon.-Sun.)

Route 5X is an intercity express route to Auburn Amtrak Depot funded by the Capitol Corridor Joint Powers Authority, which provides a direct connection to Auburn for commuters who wish to catch the Amtrak Capitol Corridor trains.

Route 6 - Penn Valley (Mon – Sat.)

Route 6 provides service to downtown Grass Valley, Lyman Gilmore Middle School, Rough & Ready, Penn Valley, and Lake Wildwood.

Route 8 - Loma Rica (Mon.–Sat.)

Route 8 provides service to downtown Grass Valley, Whispering Pines, Pride Industries, and the Nevada County Airport/Nevada County Transit Services Division office.

Route 10 - North San Juan (Tue.)

Route 10 provides service to downtown Grass Valley, downtown Nevada City, the Eric Rood Administrative Government Center, South Yuba River State Park, North Columbia, North San Juan, and Peterson's Corner.

Route 11 - Squirrel Creek Loop (Mon.–Sat.)

Route 11 provides service to downtown Grass Valley, Condon Park, and Lyman Gilmore Middle School.

Route 12 - Colfax (Wed.)

Route 12 provides service to downtown Grass Valley, Union Hill School, Cedar Ridge, Peardale, Chicago Park, Colfax Amtrak, and Colfax Greyhound.

Paratransit Services

The Nevada County Transit Services Department is responsible for the transit system administration in western Nevada County and contracts with Gold Country Telecare, Inc. to provide demand response paratransit services.

Gold Country Telecare, Inc.

Gold Country Telecare, Inc. provides demand response paratransit service for the developmentally and physically disabled in western Nevada County. In order to become eligible for paratransit service, one must submit a request for Certification of ADA Paratransit Eligibility. This form is available on the County of Nevada's website.

Gold Country Telecare, Inc. commonly provides trips to senior lunch and enrichment programs at the Senior Center for adult day care, local medical trips, and general transportation. Transportation

vouchers funded by Area 4 Agency on Aging are available to assist low-income seniors 60 years old and older. The paratransit service area includes the Grass Valley/Nevada City urban area, as well as, the communities of Penn Valley, Rough and Ready, Lake Wildwood, Cedar Ridge, and Alta Sierra. Volunteer drivers provide service mainly for out-of-county trips to medical appointments. Reservations for paratransit trips must be made at least the day prior to the trip, and may be made up to 14 days in advance of the trip. Out of county trips should be arranged at least five days in advance.

Gold Country Telecare, Inc. provides service from 7:00 a.m. to 6:30 p.m. Monday through Friday. Saturday service is provided between the hours of 9:30 a.m. to 5:30 p.m. Hours are subject to change. Gold Country Telecare also offers supplementary programs to qualified passengers. These include T.H.E VAN PROGRAM, Senior Voucher program, Sunday Senior Rides, and Neighbor-to-Neighbor Volunteer Driver Program. Days and time of service are subject to change and are shown above for general information.

Gold Country Telecare, Inc. was designated a consolidated transportation service agency by the NCTC in August of 2000. Community Transit Service funds were allocated to Gold Country Telecare for the purchase of a wheelchair accessible vehicle to provide paratransit service to primary preventive health services and related enrichment programs for seniors and disabled paratransit riders that live outside of the ADA corridor. Operating revenue for this program was made possible through a Catholic Health West Community Grant. The County of Nevada is also designated as a consolidated transportation service agency for western Nevada County.

Telecare's fleet is comprised of two large buses, 3 mid-size buses, five small buses, five modified-vans, and a company staff vehicle. All of the buses and modified-vans are wheelchair accessible and are designed to transport at least two wheelchair patrons. Volunteer drivers use their own vehicles.

EASTERN NEVADA COUNTY

- Eastern Nevada County has provided a variety of public transit services since 1991. The Town of Truckee began operating transit services after its incorporation in March 1993, by contracting with the private sector for transit management, supervision, vehicle maintenance, and operations. There are three public transit systems operating in eastern Nevada County:
- **Truckee Trolley** is the primary fixed route transit system serving the Town of Truckee and portions of Placer County and is provided by the Town of Truckee through a contract with Aztec Transportation.
- **Truckee Dial-A-Ride** is the demand response transportation service for the elderly and disabled, as well as, the general public in the Town of Truckee and is also provided through a contract with Aztec Transportation.
- "**The Bus**," provides fixed route service between the Town of Truckee and Tahoe City via SR 89 and is operated by Placer County's Tahoe Area Regional Transit (TART).

The Town of Truckee performs direct oversight of transit services provided in eastern Nevada County. Day-to-day operations are provided under contract. Placer County operates the TART Truckee to Tahoe City service.

A regional organization important to transportation in eastern Nevada County is the Truckee North Tahoe - Transportation Management Association (TNT/TMA). This non-profit public-private partnership provides a framework for private sector participation in solving traffic congestion and air

quality problems in the greater Truckee-North Tahoe-Incline Village Resort Triangle. Established in 1989, the TNT/TMA has been instrumental in garnering support from employers, property owners, and residents in establishing the Truckee-Tahoe City bus service, as well as, the Truckee Trolley service.

Fixed Route Transit Services

Truckee Trolley

The Truckee Trolley is a public-private partnership between the Town of Truckee and several private organizations. Three routes are operated during the winter months: Route A operates between Sugar Bowl Ski Area and downtown Truckee, Route B operates between Northstar-at-Tahoe Ski Resort and downtown Truckee, and Route C operates between Kings Beach and Northstar-at-Tahoe Ski Resort. These routes operate seven days per week from roughly 7:00 A.M. to 7:00 P.M. In non-winter months, one bus is operated Monday through Saturday between downtown Truckee and the west end of Donner Lake between roughly 9:00 A.M. and 5:00 P.M.

Public-private partnerships, such as the Northstar-at-Tahoe Ski Resort paying for employees and guest riders from both Truckee and Kings Beach to its resort, result in the high farebox recovery for the Truckee Trolley. To improve the reliability and expand the partnership of the Northstar Route, the North Lake Tahoe Resort Association also participates in the funding of this route. These partnerships have assisted the Town of Truckee in funding and maintaining transit services in the region. With limited funding available for transit operations and ongoing capital replacement needs, it will be important for the Town of Truckee to continue to build upon the public/private partnerships in eastern Nevada County.

The TART Truckee-Tahoe City Service "The Bus"

Tahoe Area Regional Transit (TART) operates the Truckee-Tahoe City transit service, known as "The Bus". The service has been operating between Truckee and Tahoe City since December of 1991. Since the route serves two different counties, the Town of Truckee contributes a portion of the funding, with Placer County funding the remaining operating costs. Service is provided hourly December through mid-April during the winter peak season and then every two hours during the off-peak season. The route stops at shopping areas along Donner Pass Road, Squaw Valley, and Alpine Meadows. "The Bus" does not go into Squaw Valley or Alpine Meadows, but drops off passengers at the ski area entrances where they can transfer to the ski area shuttles. Riders traveling from the Truckee area can transfer for free to other TART routes in Tahoe City or the North Shore Trolley if they want to continue to other areas along the north and south shores.

Paratransit Service

Truckee Dial-A-Ride Service

The Town contracts with Aztec Transportation for operations of the Truckee Dial-A-Ride program. The Truckee Dial-A-Ride is a general public demand response service that operates Monday through Friday from 8:00 A.M. to 5:00 P.M. Days and time of service are subject to change. Passengers are asked to make reservations by 5:00 P.M. the previous service day, though same-day requests are accommodated when possible. The Town of Truckee owns all three vehicles that are leased to Aztec Transportation to operate this service; two vehicles are used during peak periods. Only two of the three vehicles are wheelchair-accessible. The Town of Truckee has implemented some innovative practices to integrate the Dial-A-Ride and Truckee Trolley. Dial-A-Ride is considered an "extension" of the fixed route service, covering the outlying suburbs that are not served by the Trolley. The fare policy encourages fixed route transit use by offering a free transfer to either the

Truckee Trolley going to Kings Beach or the TART Bus to Tahoe City. The dispatch policy also supports fixed route transit. When the dispatcher receives a call, he/she first checks to see if the trip can be made on the fixed route transit, either completely or partially. If so, those options are offered before making a door-to-door reservation.

Transit Planning

Five-Year Transit Development Plans (TDP) are an important planning tool used to analyze the current transit services and provide recommendations on improvements necessary to meet future demand. In 2003, TDPs were completed for western and eastern Nevada County. The major issues facing both western and eastern Nevada County transit and paratransit services were that rising operating costs coupled with the need to replace aging vehicle fleets over the period of the plan were outpacing the projected revenues. In order to insure that transit and paratransit services would be financially sustainable over the plan period the consultants recommended modifications to routes, elimination of unproductive services, reducing the paratransit coverage area, fare increases, and additional contributions from private partners.

The County of Nevada received a Federal earmark as part of the federal reauthorization in the amount of $777,747 for construction of a new Gold Country State transit transfer facility in western Nevada County. NCTC applied for a State Transit Technical Planning Assistance Grant for the 2006/07 FY funding cycle to conduct a site evaluation study and identify the potential amenities for such a facility. The current on-street transfer facility in downtown Grass Valley is located at Church and Neal Street. The facility consists of one passenger shelter, and has capacity for three buses at a given time. Accessibility for persons with disabilities is limited by the narrow sidewalk at this location. In addition, the facility provides no restroom facilities for the use of bus drivers, and presents operational difficulties due to traffic congestion and difficult turning movements.

Development of a new facility will enable all eleven Gold Country Stage routes to meet, facilitating timed-transfers between routes. In addition, it will provide a more convenient and attractive waiting area for passengers, improved accessibility for persons with disabilities, and restroom facilities for bus drivers. The larger goal of the project is to make transit a more attractive and convenient transportation option for local residents and visitors. The facility will also make it easier for transit passengers to access intercity and interregional services at the Auburn Depot, where Gold Country Stage connects with Placer County Transit, Auburn Transit, and Amtrak/Capitol Corridor trains and buses.

In 2005, NCTC hired a consultant firm to complete a study that examined the different governance structures commonly used for the provision of transit and paratransit services in California, and provide a recommendation for western Nevada County. The consultants examined Nevada County's transit system governance and costs, and compared it to other peer transit systems of similar size, as well as, industry norms. The consulting team recommended a shift to a staffed Joint Powers Authority. The fundamental reason for this recommendation was they felt that it would create a more streamlined governance structure, and that there may be potential long-term savings. The current Joint Powers Agreement members, Nevada City, Grass Valley, and Nevada County, are currently discussing the possibility of shifting to the recommended governance model in the future.

The demand for transit and paratransit services is expected to increase. As demand increases it will be important for the growth of these services to be monitored and measures taken to ensure funding is available to meet transit needs that are determined to be reasonable to meet. Additional transit facilities and services will need to be provided, where feasible, in key locations in the County to accommodate as much of the travel demand as possible. Transit services must be affordable, comfortable, convenient, and reliable. The benefits of increased transit ridership are reduced congestion and improved air quality.

Tables 8 and 9 below display the fiscal year 2004/05 operating information for each of the specialized paratransit services and fixed route transit services in Nevada County.

TABLE 8

SPECIALIZED TRANSIT SERVICE OPERATIONS, 2004/05 DATA

Transit Service	Ridership	Operating Costs	Revenue	Farebox Recovery
Gold Country Telecare(Prof. & Volunteer Data Combined)	43,828	$810,105	$95,210	11.8%
Truckee Dial-A-Ride	16,543	$208,140	$20,333	9.7%

TABLE 9
FIXED ROUTE TRANSIT SERVICE OPERATIONS, 2004/05 DATA

Transit Service	Ridership	Operating Costs	Revenue	Farebox Recovery
Gold Country Stage	245,881	$1,729,829	$265,930*	15.5%
Truckee Trolley	41,823	$251,649	$96,230	38%

*Payments from Placer County for Route 5 and from the CCJPA/Amtrak for Route 5X were included as fare revenue.

Farebox recovery is one of several methods typically used to analyze the performance of transit services. The farebox recovery ratio reveals the percentage of operating costs that are paid directly by the passengers. Transit operators who make claims under Article 4 of the Transportation Development Act in rural counties such as Nevada County are required to maintain a minimum farebox recovery ratio of 10 %. The NCTC has set a goal of 16 % farebox recovery ratio for all transit services within Nevada County.

Capital Replacement Needs

The Nevada County Transit Services Division anticipates the need to replace approximately three fixed route transit buses annually at a cost of approximately $240,000. Western Nevada County is forecasted to receive a minimum of approximately $800,000 in Congestion Mitigation Air Quality funding annually, which may address the replacement of fixed route transit vehicles. Gold Country Telecare, the paratransit provider in western Nevada County, anticipates the need to replace two paratransit buses annually at a cost of $90,000. Gold Country Telecare intends to continue to utilize Federal Transit Administration 5310 grant funding to meet the ongoing needs. Over the next five years, the Town of Truckee is planning to replace two Truckee Dial-A-Ride vehicles in Fiscal Year 2006/07 at a cost of $160,000, and two Truckee Trolley 30 passenger buses at a cost of $300,000 utilizing Local Transportation Funds.

TRANSIT SERVICES ACTION PLAN

Short-Term

1. Conduct marketing efforts to promote the use of fixed route services in western Nevada County and make the public aware of the transit options available. (Transit operators)
2. Monitor transit services regularly and make adjustments to routes and schedules as needed. (Transit Operators, Transit Services Commission)
3. Continue to obtain public input on the fixed route and paratransit services by holding annual unmet transit needs workshops and hearings. Implement expanded services that are determined reasonable to meet as feasible. (NCTC, transit operators, jurisdictions, Transit

Advisory Committee, Social Services Transportation Advisory Council)

4. Implement and/or modify paratransit services to continually meet the requirements of the Americans with Disabilities Act. (Transit operators, Transit Services Commission)

5. Annually budget for vehicle replacement to build a reserve to meet the capital replacement needs or the fixed route transit fleet. (Transit operators)

6. Continue efforts and incentives that encourage paratransit users who are able to utilize the fixed route transit system to do so. Transitioning paratransit riders who are able to use fixed route service is in the interest of both the rider and the transit system, since fixed route services offer a higher level of mobility at a lower per trip subsidy than paratransit services. Transit ambassador programs or other types of travel training that encourages this transition should be considered for Nevada County. (Transit operators)

7. Continue to seek public/private partnerships to assist in providing transit and paratransit services in Nevada County. (Transit operators, Truckee North Tahoe Transportation Management Agency)

8. Submit for a State Transit Technical Planning Assistance Grant to conduct a site evaluation study for a future transit transfer facility in western Nevada County. (NCTC, Nevada County Transit Services Division)

Long-Term

1. Update the short range transit plans for the transit operators with continued emphasis on meeting the transit needs of the growing and changing population within the constraints of available funding. (NCTC, transit operators, jurisdictions, Transit Services Commission)

2. Construct a new transit transfer facility to improve the provision of transit services in western Nevada County. (Nevada County Transit Services Division, Nevada County Department of Transportation and Sanitation)

3. Work with the transit operators to develop long range plans as needed – with a focus on capital and infrastructure needs. (NCTC, transit operators, jurisdictions, Transit Services Commission)

NON-AUTO FACILITIES

Non-Auto Facilities Planning Activities

Although bicycle, pedestrian, and equestrian trails have been planned for Nevada County, the number of existing trails have been limited by physical/funding constraints. In Nevada County, on-street parking in downtown areas, narrow roadways, limited right-of-way, and topographical constraints make planning these types of facilities challenging and proposed projects are often very expensive. As the County grows, some bicycle and pedestrian facilities will be completed as part of future development and road improvement projects. Most pedestrian and bicycle projects will be constructed through funding available from Federal and State sources. Public funds have been used to construct nearly all of the existing facilities in urbanized areas of the County.

In 2001, the County of Nevada Department of Transportation completed the Nevada County Non-Motorized Transportation Master Plan. This plan identifies future commute, sidewalk, and safe route to school facilities to be implemented in Nevada County. It also identifies some general corridors to be studied for possible development of recreational trails.

In April 2002, the *Truckee Trails and Bikeways Master Plan* was completed by the Town of Truckee. This long-range planning document focused on both recreational trails and on-street bikeways to create a framework for the creation of a town-wide system. The Plan will be used as a tool to guide the incremental development of specific recreational trail segments and on-street bikeways as resources and opportunities arise.

The *Grass Valley Parks and Recreation Master Plan* completed in 2001 developed a planning level trail/sidewalk framework of potential future improvements. This study also recommended the establishment of trails/linear parkway along the Wolf Creek corridor. The City of Grass Valley is currently in the process of completing a planning study focused on developing a concept and alternatives for the potential future development of a trail and parkway along the Wolf Creek corridor.

The NCTC will be incorporating the information from the planning efforts listed above and input from citizens and the local jurisdictions into the next update of the *Nevada County Bicycle Master Plan*. NCTC will be applying for a Transportation Planning Grant for the 2006/07 FY funding cycle to accomplish the update of the *Nevada County Bicycle Master Plan* and to develop a comprehensive countywide non-motorized trails plan. The *Nevada County Bicycle Master Plan* is a countywide plan that focuses on bicycle transportation/commute facilities with a focus towards the urbanized areas of the County. Figure 4 (page 61) displays typical cross sections of the different classes of bike lanes.

Implementation of projects within the *Nevada County Bicycle Master Plan* would increase the quantity of non-auto trails in Nevada County, which have the greatest potential to serve as an alternative mode of transportation. However, due to the County's topography, weather, and long travel distances related to rural development patterns, non-auto trails cannot be expected to significantly reduce automobile dependency or use, except in urbanized areas. Information from updates to the Bicycle Master Plan will be included in future Regional Transportation Plans.

Existing Transportation Oriented Non-Auto Facilities

- ***Mount Olive Bike Path*** is a Class I path adjacent to Mount Olive School near Lower Colfax Road. (see page 50 for description of the different classes of bike paths)
- ***Magnolia School Trail*** is a short path that serves school students along Magnolia Road.
- ***Penn Valley Bike Path*** is a Class I path that runs from Western Gateway Regional Park to the corner of Penn Valley Drive and Spenceville Road.

- ***East Main Street*** has a Class II bike lane between Hughes Road and Brunswick Road.
- ***Ridge Road*** has a Class II bike lane from Alta Street to the Nevada City Highway.
- ***Nevada City Highway*** has a Class II bike lane from Gold Flat Road to Gates Place.
- ***Litton Trail*** is a 3/5-mile paved trail between Sierra College Drive and Hughes Road in Grass Valley. The Nevada County Land Trust extended the trail adding another mile of dirt trail around the meadow and wooded edges of the Sierra College campus, returning to Sierra College Drive. Given its location, the new trail provides an important pedestrian link to Nevada Union High School and Ridge Road. Future links through the Eskaton Project and Glenwood Road developments are being explored.
- ***Donner Pass Road*** has a Class II bike lane from the I-80 overpass at Cold Stream to the I-80 overpass at downtown Truckee.
- ***Multiple Use Truckee River Crossing*** is a cement bridge crossing the Truckee River between East River Street and the Truckee Regional Park.
- ***Truckee River Legacy Trail*** is a multi-use trail planned along the Truckee River from SR 89 to the Glenshire subdivision. Phase 1 was finished in the fall of 2001 and runs from the stoplight on Brockway Road to the bridge at the end of East River Street. Phase 2 of the project, between the Truckee River Regional Park and the newly constructed Truckee Sports Park facility, was officially opened in September 2004.
- ***Combie/Magnolia Multipurpose Path*** project proposes to construct a path on Combie Road eventually extending to SR 49 and improving an existing section of trail along Magnolia Road that runs from West Hacienda Way eastward past the Bear River High School to the elementary school. The project will also close an approximate 400-foot gap that exists in the path just before the elementary school and adjacent to a ballpark.

Existing Recreational Non-Auto Facilities

- ***South Yuba Trail*** is a recreational trail that extends 4 miles from Purdon Crossing to Edwards Crossing and the South Yuba Campground, where it extends 15 miles to the Town of Washington.
- ***Independence Trail*** is a 2 mile recreational trail adjacent to Highway 49, north of Nevada City, with access for the disabled.
- ***Scotts Flat Trail*** is a 50 mile recreational trail that crosses both Forest Service and private property. It serves Upper Burlington Ridge, Deer Creek Forebay, Indian Springs, and Towle Mill.
- ***Nugget Trail*** is a recreational trail that extends approximately 50 miles to the Sierra County line. It also crosses both Forest Service and private property.
- ***Emigrant Trail*** is a historic trail of regional significance extending through the entire County.
- ***Pioneer Trail*** parallels Highway 20 east of Nevada City. Approximately 15 miles are complete, with plans for an extension to the Pacific Crest Trail.
- ***Missouri Bar Trail*** is a recreational trail that extends north of Highway 20 across the South Yuba River.
- ***Wildwood*** is a proposed equestrian center and trail system of approximately 20 miles near Lake Wildwood.

- ***Empire Mine State Historic Park*** has a trail system of approximately 10 miles SR 49 and SR 174 in Grass Valley.
- ***Pacific Crest Trail*** is a north-south trail extending from Canada to Mexico through the eastern portion of the County.

Most of these trails are oriented towards recreational use and do not provide practical alternatives for auto transportation within the urbanized areas of Nevada County, but may be linked in the future to transportation oriented trails if opportunities exist.

Non-Auto Facility Needs

Bicycle ridership and pedestrian activity levels are not easily measured or projected for an entire county without extensive data collection efforts. The concept of "demand" for these facilities is difficult to measure. A common term used in describing demand is "mode split". Mode split refers to the form of transportation a person chooses to take, be it walking, bicycling, using public transit, or driving. Mode split is often used in evaluating commuter alternatives such as bicycling, where the objective is to increase the "split" or percentage of people selecting an alternative means of transportation. The 2000 Census data for Nevada County identifies the journey-to-work mode split information for workers sixteen years old and over.

As shown in Table 3 (page 13), less than one percent of home-based work trips for Nevada County residents are made by bicycle, and approximately three percent are pedestrian trips. However, the census data does not include trips from home-to-school in the data set. This is important because home-to-school trips occur during the same morning peak travel hours as typical commuter trips. Since many children walk or ride bicycles to school, the actual number of bicycle and pedestrian trips during the morning peak hour is slightly higher than shown. All of the Gold Country Stage vehicles are now bike-rack equipped, and this provides the opportunity for transit patrons to utilize the transit services as a "bike-ride" mode of transportation.

Nevertheless, the limited amount of pedestrian facilities and bikeways in Nevada County may be discouraging residents from walking and bicycling. Several factors influence the decision to bicycle or walk, the most prevalent factor is the perception of a lack of safe facilities. In order for non-motorized transportation to be a viable transportation option, it must be safe, attractive, and easy to utilize. Generally this includes use of pathway design techniques that promote safety and eliminate barriers, and the placement of paths in sufficient location and numbers to connect important activity centers such as schools, commercial centers, parks and residential areas.

NON-AUTO FACILITIES ACTION PLAN

Short-Term

1. Develop a bicycle master plan that can be incorporated into the planning, construction, and maintenance activities of Nevada County, Grass Valley, Nevada City, and Truckee. *(NCTC, jurisdictions)*

2. Submit an application for a FY 2006/07 Transportation Planning Grant to update the Nevada County Bicycle Master Plan and a countywide non-motorized trails plan. *(NCTC, jurisdictions)*

3. Create a bikeway system that is cost-effective to construct, maintain, and minimizes the potential for conflicts with other types of vehicles, and places a priority on facilities that serve areas with the greatest demand. (*NCTC, jurisdictions*)

4. Solicit and consider community input in the design and location of bikeway facilities. (*NCTC, jurisdictions)*

Long-Term

1. Encourage future development to dedicate the right-of-way for off street bikeways with connections to future planned facilities outside of the development in mind. *(Jurisdictions)*

2. Apply for State and Federal grants to implement non-auto facilities in Nevada County. *(Jurisdictions)*

3. Develop a coordinated approach to implementing and maintaining bicycle facilities between Nevada County, Grass Valley, Nevada City, Truckee, Placer County Transportation Planning Agency, and the Tahoe Regional Transportation Planning Agency. (*NCTC, jurisdictions, Placer County Transportation Planning Agency, Tahoe Regional Transportation Planning Agency)*

Figure 4 Bikeway Classifications

INTELLIGENT TRANSPORTATION SYSTEMS

Overview

Intelligent Transportation Systems (ITS) involves the integration of communication and information technologies into the transportation system in order to make the most efficient use of existing transportation infrastructure. The successful implementation of ITS programs and technologies is essential to ensure that all modes of travel remain as safe and efficient as possible.

The Transportation Equity Act for the 21st Century (TEA-21) seeks to accelerate the integrated deployment of ITS through the use of regional ITS architectures. This has caused the incorporation of ITS into regional transportation planning to take on a much greater emphasis. This greater emphasis requires that a region's ITS projects and a region's ITS architecture be consistent with one another and consistent with the requirements of the National ITS Architecture and Standards.

Intelligent Transportation Systems Needs Assessment

The Placer County Transportation Planning Agency coordinated an ITS planning effort for the four counties which comprise the Tahoe Gateway Planning Area (Nevada, El Dorado, Placer and Sierra). In 2002, the *Tahoe Gateway Counties ITS Strategic Deployment Plan* (SDP) was adopted by the four Regional Transportation Planning Agencies. The implementation of ITS technologies will be aimed at improving safety and enhancing the capacity of the existing transportation facilities through more effective management and operation of the transportation system. ITS applications will be included to address the unique aspects of the rural environment where challenges include rapid changes in weather, limited alternative routes, and difficulties in developing effective communication systems.

One of the outcomes of this planning process was the development of the Tahoe Gateway Regional Architecture. The regional architecture provides the foundation for how the region's ITS systems will integrate together to form information gathering, processing, and dissemination procedures, and defines potential ITS equipment packages. The Tahoe Gateway Regional Architecture was developed to serve as a blueprint to ensure the coordinated development and deployment of compatible ITS applications in the Tahoe Gateway region. The Tahoe Gateway Regional Architecture is intended to be flexible and will be modified as ITS projects are deployed, the communications infrastructure expands, and the region's needs are addressed or changed. The Tahoe Gateway Regional Architecture meets Federal requirements to qualify ITS projects in the region for Federal funding.

The following list summarizes the high priority need areas in the Tahoe Gateway Region (in random order):

- Enhanced traveler information within and beyond project boundaries
- Improved cooperation and coordination among transportation agencies and others
- Improved traffic flow and system operation monitoring
- Advanced technology uses to more effectively and efficiently operate traffic signal systems
- Coordinated, efficient transit and public transportation systems
- Coordinated incident/emergency management plans and procedures (including HAZMAT)
- Improved traveler safety
- Enhanced access and availability of tourist information
- Accurate, early traffic information to commercial vehicle operators
- Active fleet management of State/locally owned highway maintenance vehicles

- Improved integration of information and systems to better manage the transportation assets

The proposed ITS projects identified for Nevada County in the *Tahoe Gateway Counties ITS Strategic Deployment Plan* were as follows:

- Town of Truckee congestion management and signal system upgrade
- Installation of highway advisory radio and a dynamic message sign near SR 20 north of Nevada City
- I-80 Freeway surveillance near the Town of Truckee
- I-80 Traveler information
- Automatic vehicle identification and location for emergency vehicles
- Implement automatic vehicle identification and location, as well as, computer aided dispatch technologies for public transit
- Install ice detection and warning systems on I-80 and SR 89
- Install rock/mudslide and avalanche detection and warning system at SR 20, SR 49, and SR 89 as appropriate
- Install animal/vehicle collision avoidance systems were applicable

INTELLIGENT TRANSPORTATION SYSTEMS ACTION PLAN

Short-Term

1. Maximize the operating efficiency of the existing surface transportation system, through implementation of ITS elements in the Tahoe Gateway region. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*

2. Improve the safety of travel into, through, and out of the Tahoe Gateway Region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*

3. Ensure that accurate and reliable traveler information regarding traffic and weather conditions is available to those entering the region, as well as those traveling within the region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*

4. Provide more effective and convenient transit services, through the implementation of automatic vehicle identification and location devices with compatible computer aided dispatch technology. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, transit operators).*

5. Ensure efficient commercial vehicle operations into, through, and out of the Tahoe Gateway Region, through implementation of the ITS projects contained in the *Tahoe Gateway Counties ITS Strategic Deployment Plan*. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*

6. Ensure the long-term viability of ITS in the Tahoe Gateway Region by reviewing and updating the *Tahoe Gateway Counties ITS Strategic Deployment Plan* as necessary. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, FHWA)*

7. Maintain an ITS program that is compatible and supported by National ITS efforts through periodic maintenance of the Tahoe Gateway ITS Architecture. (NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)

Long-Term

1. Continue coordination and implementation (deployment, operations, and maintenance) of ITS elements in the Tahoe Gateway Counties. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

2. Continue regional ITS management via each member County, neighboring regions, and other agencies, organizations, and individuals. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

3. Mainstream or incorporate ITS technologies into the planning process as stand-alone projects and/or as part of larger transportation projects. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

4. Ensure that a Regional ITS Architecture Maintenance Plan is maintained and implemented. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

TRANSPORTATION SYSTEMS MANAGEMENT

Well planned, cost-effective transportation operations and management actions can improve mobility, safety, and productivity of the system for transportation users in Nevada County. Transportation Systems Management (TSM) is often used interchangeably with Transportation Control Measures (TCM) and Transportation Demand Management (TDM) to describe a series of techniques designed to maximize the efficiency of the existing transportation system. The emphasis of these methods are to reduce traffic congestion, delay the need for new and expensive transportation improvements, reduce the dependence on single occupant vehicles, and improve air quality. These methods generally employ techniques that are low-cost measures to reduce travel demand or improve the utilization of the existing transportation infrastructure.

TSM strategies focus on increasing the efficiency, safety, and capacity of existing transportation systems through techniques such as facility design treatments, access management programs, targeted traffic enforcement, and Intelligent Transportation Systems (ITS). TCMs are focused on reducing air pollution through techniques such as alternative fuel vehicles. TDM addresses traffic congestion by reducing travel demand rather than increasing transportation capacity. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions and programs are implemented through both the public and private sectors. The Truckee/North Tahoe Transportation Management Association in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs.

Transportation Systems Management Strategies

Traffic Flow Improvements

Roadway re-striping, channelization, auxiliary lanes, elimination of on-street parking, pavement markings and signage to communicate lane utilization, and computerized signalization are techniques currently used to improve the flow of traffic without new road construction. Roadway re-striping seeks to increase the number of lanes by reducing lane width, thus increasing traffic capacity. Channelization, which is often done in conjunction with re-striping, adds turn lanes to busy roadways to eliminate traffic backups behind cars trying to make turns. Computerized signalization seeks to coordinate signal timing to smooth traffic flow.

Transit

Public transit service is an alternative mode of transportation that is utilized in Nevada County by residents who commute to work and school as well as for shopping, medical, and leisure trip purposes. Marketing efforts to increase public awareness of the public transit options available should be conducted by the transit operators in Nevada County.

Park-and-Ride Lots

The purpose of park-and-ride lots is to provide a central meeting place adjacent or in close proximity to major travel routes where commuters can congregate and form carpools or catch buses for the remainder of the commute trip. There are currently four Caltrans park-and-ride lots located in Nevada County at the following locations:

- SR 20 at Pleasant Valley Road

- SR 20 at Penn Valley Drive
- SR 20/49 at South Auburn St.
- SR 49 at the Cornerstone Calvary Chapel Church

Ridesharing

The Sacramento Council of Governments (SACOG) manages the Regional Rideshare program covering the counties of El Dorado, Placer, Sacramento, Yolo, Yuba, Sutter, and Nevada. The purpose of the Regional Rideshare program is to encourage the use of alternative transportation options for traveling to work, school, personal trips, and recreation. The Regional Rideshare program has a database of commuters interested in ridesharing (carpools and vanpools) and can be accessed on the internet at http://www.sacregion511.org/rideshare/index.cfm or by dialing 511 on your cell phone.

Intelligent Transportation Systems

The Tahoe Gateway ITS Strategic Deployment Plan recommends implementation of several technological improvements that can improve the flow and timeliness of information available to the traveler in order to avoid and/or reduce traffic congestion and delays due to traffic. These regional projects focus on traveler information management, emergency signal system technology, traffic management, and communications.

An example of a regional ITS project is the recently implemented 511 comprehensive traveler information system. The 511 system provides access to information about all modes of travel including: traffic conditions for commuters, bus and light rail information for more than 20 transit agencies, paratransit services for the elderly and disabled, and information about ridesharing and commuting by bike. The telephone service is available in English and Spanish and is accessed by calling 511 on your cell phone. The 511 website contains the same valuable information and can help users plan their daily commutes, access transit providers, and find a carpool partner. Users can check commute options and know road conditions before traveling and reduce congestion. For more information about the 511 service, visit the SACOG website at www.sacog.org.

Transportation Demand Management Strategies

Expansion of Broadband Services

Future expansion of broadband coverage, such as DSL (which provide for a faster and more convenient internet access) could reduce the need for certain types of automobile trips given the growing popularity of e-commerce. Instead of getting in ones car and going to shopping malls and dealing with traffic and the high cost of gasoline, a person may choose to simply stay home and shop online. E-Government and other business websites in Nevada County that allow people to avoid making an automobile trip, by having information accessible online, are also becoming more prevalent. In addition, a new wireless technology called Worldwide Interoperability for Microwave Access (WiMAX) will allow certain products, for example newer cell phones, the ability of forming wireless connections and allow the provision of broadband internet services. Local DSL internet providers, cable companies, and community sponsored wireless fidelity (Wi-Fi) hotspots are currently providing broadband services in the core areas of Nevada County.

The County of Nevada completed an E-Government expansion project in September 2002, made possible by grant funding provided by the Northern Sierra Air Quality Management District. The project expanded the Nevada County website to provide additional information, forms, and services to the public that they would otherwise require an automobile a trip to the County Government Center. Over a one year period from 2001 to 2002, an analysis of the trip reductions determined that the project had reduced approximately 136,240 vehicle trips and an approximate 3,079,024 vehicle miles traveled, which is equivalent to reducing one entire day worth of vehicle trips over the study period relieving congestion and resulting in air quality benefits. The expansion of broadband services into the outlying areas currently not be served will provide county residents with alternative to making certain trips by automobile. A map of the existing broadband coverage in western Nevada County can be downloaded from the Nevada County Economic Resource Council website (http://spiral.he.net/~sierratc/erc/wireless.php).

Telecommuting, Compressed Work Weeks, and Flexible Hours

TDM actions maximize transportation system utilization through modification of travel behavior decisions. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions are implemented through both the public and private sectors.

Telecommuting, compressed work weeks, and flexible work hours are employment-based techniques to reduce the number of work trips per week, or to transfer trips to reduce peak hour congestion. Telecommuting, or alternative work locations, allows workers to perform job duties at home or another location, communicating with the main work center by modem, fax, or telephone as necessary. This alternative is especially attractive for workers in rural areas, or those commuting long distances. The addition of new and lower cost technologies, such as DSL, will continue to encourage telecommuting as a TDM strategy.

Teleconferencing

Teleconferencing is generally defined as meetings held by telephone or via video hookup to replace the need for traveling to meet in person. Teleconferencing is a common technique used by employers as a cost-effective way of conducting meetings and avoiding the need to travel.

Alternative Fuels

Alternative fuels are used to power motor vehicles, while reducing the impacts to air quality. Common alternative fuels include methanol, propane, compressed natural gas, and electricity.

Transportation Management Associations

In September of 1998, the Nevada County Business Association, acting as the Western Nevada County Transportation Management Association (WNC/TMA), made the financial decision that it could no longer provide the necessary human resource subsidization to manage the TeleBusiness Center and Employer Trip Reduction Programs. Currently, the WNC/TMA's status remains as inactive. The Nevada County Transportation Commission will continue to work with the Northern Sierra Air Quality Management District (NSAQMD) and other appropriate agencies to promote the implementation of TSM/TDM measures within Nevada County in the absence of the WNC/TMA.

The Truckee North Tahoe - Transportation Management Association (TNT/TMA) in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs. The TNT/TMA has taken a leadership role in the development and implementation of

TDM strategies in eastern Nevada County, including, but not limited to, ridesharing, vanpooling, and expanded transit.

As the population of Nevada County increases, Transportation Demand Management actions will become increasingly important to ensure efficient utilization of the transportation system, to assist in the achievement of air quality standards. Costs to implement TSM/TDM measures vary widely. Each proposed project will be evaluated for its cost/benefit potential.

TSM ACTION PLAN

Short and Long-Term

1. Work cooperatively with neighboring jurisdictions to implement ITS improvements that would support TSM efforts in the region. (NCTC, PCTPA, EDCTC, TRPA, Sierra County, Caltrans)

2. Encourage increased marketing efforts in Nevada County to increase public awareness of transit opportunities and the benefits on air quality. (NCTC, NSAQMD, Nevada County, Town of Truckee, TNT/TMA)

3. Coordinate with local jurisdictions to identify and implement traffic flow improvements on regionally significant roadways. (NCTC, jurisdictions, Caltrans)

4. Improve and expand public transportation systems as feasible through the annual unmet transit needs process. (NCTC, transit operators, SSTAC)

5. Encourage the use of alternative fuels to reduce impacts on air quality as feasible. (NCTC, NSAQMD)

6. Develop and expand facilities to support the use of alternative transportation such as pedestrian and bicycle facilities, park-and-ride lots, and transit transfer stations. (NCTC, jurisdictions, Caltrans)

7. Encourage employers to offer staggered shifts, flexible hours, compressed work weeks, and high occupancy vehicle preferential scheduling. (NCTC, jurisdictions, TNT/TMA, NSAQMD)

8. Encourage employer based carpool programs to increase employee vehicle occupancy through incentives or requirements. (NCTC, jurisdictions, TNT/TMA, NSAQMD)

9. Promote work-at-home and telecommuting options on the NCTC website. (NCTC)

10. Support organizations promoting broadband expansion. (NCTC, jurisdictions, NSAQMD)

11. Encourage the development and expansion of municipal Wi-Fi/WiMAX networks. (NCTC, jurisdictions, NSAQMD)

AIR TRANSPORTATION

Existing Conditions of Air Transportation Facilities

There are two general aviation airports in Nevada County. The Nevada County Air Park, located east of Grass Valley, serves western Nevada County, and the Truckee-Tahoe Airport, located in the Martis Valley, serves eastern Nevada County. The general location of each airport is displayed on Figure 5 (page 75).

The Nevada County Air Park is a small aircraft airport classified in the Airport Reference Code as B-1, meaning it generally accommodates aircraft less than or equal to 12,500 pounds and less than 49 foot wingspan. The *1990 Nevada County Air Park Master Plan* recommended expansion of the Air Park, which included physical improvements to meet future demand, and to correct a line-of-sight distance requirement for aircraft. In fiscal year 1995/96 a major airport renovation took place. The runway was lengthened to 4,100 feet, a parallel taxiway added and ramp space expanded. Since then airport has added a new terminal building, over 40 executive hangers, a Global Positioning System (GPS) approach and Automatic Weather Observation System (AWOS) capability.

The Truckee-Tahoe Airport is classified in the Airport Reference Code (ARC) as a B-II Airport, which handles predominantly small aircraft. As it has the capability to handle larger aircraft due to runway size, plans are to move to an ARC of C-II. This airport is owned and operated by a special airport district, which includes portions of eastern Nevada and Placer Counties.

To protect the public's investment in the Nevada County Air Park or Truckee-Tahoe Airport, avigation easements will be obtained over properties contained within the boundaries of the airport's Comprehensive Land Use Plan, as opportunities present themselves.

Regional Overview

Truckee-Tahoe Airports

Truckee-Tahoe Airport is the primary airport serving the entire north Lake Tahoe region (including Incline Village, Nevada), the Truckee area, and the Donner Summit area of Northern California. The airport is located in a prime year-round recreational area, situated near the center of a 70-square mile area known as the Martis Valley. The valley is bound on the east, south, and west by ridges of the Sierra Nevada Range, which rise in some areas to elevations exceeding 9,500 feet. The elevation of the airfield is 5,900 feet.

The Airport is located approximately two miles southeast of the Town of Truckee, along SR 267, in an area, which serves as a transportation hub for the region. Located along California's eastern border, the area is accessible by Interstate 80, which is the major east-west trans-Sierra highway. The area lies 211 miles east of San Francisco, 114 miles east of Sacramento, 502 miles north of Los Angeles, and 35 miles west of Reno.

Nevada County Air Park

Nevada County Air Park is located in the western end of Nevada County, within five miles from the County's major cities of Grass Valley and Nevada City. The airport lies at an elevation of 3,150 feet in the foothills of the Sierra Nevada Mountain Range. As the sole public-use general aviation airport in western Nevada County, the Nevada County Air Park is both a vital local transportation facility and a key link to the statewide air transportation system.

The area lies 150 miles east of San Francisco, 50 miles east of Sacramento, 450 miles north of Los Angeles, and 95 miles southwest of Reno. Located in the Sierra Nevada foothills, the Nevada County Air Park lies 2.75 miles to the east of State Route 49 and 2.5 miles northwest of SR 174.

Air Passenger Forecast and Trends

The Nevada County Air Park and the Truckee-Tahoe Airport do not provide commercial airline passenger service. The two airports located in Nevada County emphasize recreational, business, and emergency needs.

This lack of local commercial air passenger service in Nevada County forces local area residents to travel to Sacramento, San Francisco, or Reno to access their air travel needs. The desired destination of the air traveler quite often dictates an individual's choice of location to access air passenger service. Economic and time factors are also considerations in selecting commercial air service locations, such as lower fares at the larger airport and scheduling constraints. Consequently, the role of the Nevada County Air Park and the Truckee-Tahoe Airport in the area of air passenger service remains one of a support effort for the larger facilities.

No scheduled airline service has been offered at Nevada County Air Park in the past and no such proposals are currently active. Air taxi service on a non-scheduled charter basis has been and continues to be available through the Airport's fixed base operations.

Truckee-Tahoe Airport is not currently serviced by scheduled airline service; however, the existing runway length, instrument approach capability, and growing local population and economy have potential to attract air service. Considering the proximity of Truckee to Reno, Nevada, any potential airline service would likely be commuter/regional type airline service serving Reno International Airport, although the potential exists for service to other destinations on scheduled or charter basis.

Air Cargo Demand Forecasts and Trends

The Nevada County Air Park and the Truckee-Tahoe Airport do not serve as a hub for cargo service. The Chico, Redding, Sacramento, and Reno Airport facilities provided a full compliment of cargo services to the northern California area.

General Aviation Demand Forecasts and Trends

The Nevada County Air Park and the Tahoe-Truckee Airport are classified as "Regional" General Aviation airport facilities as a result of an airport classification study performed by the State of California Department of Transportation. The operational uses at the two airports are similar. The facilities provide a range of services to general aviation customers. The two airports predominately serve as a base for local personal and recreational flyers, a point of access for personal and recreational visitors to the community, a transportation facility for business/corporate aviation, a place to conduct aviation-related business, and a site for emergency access to the community.

The Nevada County Air Park serves single engine, twin-engine, turbo prop, business jets, based fire attack aircraft and helicopters. Similarly, the Truckee-Tahoe Airport serves single engine, multi-engine, turbo prop, turbo fan, helicopters, business jets and gliders.

The number of aircraft operations and based aircraft at the Nevada County Air Park and the Truckee-Tahoe Airport are projected to increase over the next twenty years as displayed in Tables 10 and 11 (page 71) respectively.

TABLE 10
NEVADA COUNTY AIR PARK ACTIVITY DATA AND FORECASTS

Activity Type	2000	2005	2010	2015	2020
Total Based Aircraft	150	156	187	199	212
Total Aircraft Operations	54,851	62,164	68,015	72,769	77,552

Source: Caltrans, Aeronautics Program. California Aviation System Plan, September 1999. Nevada County Air Park Manager, Greg Marshall

TABLE 11
TRUCKEE -TAHOE AIRPORT ACTIVITY DATA AND FORECASTS

Activity Type	2000	2005	2010	2015	2020
Total Based Aircraft	118	133	146	156	166
Total Aircraft Operations	40,124	45,509	49,818	53,049	56,550

Source: Caltrans, Aeronautics Program. California Aviation System Plan, September 1999.

Analysis of Aviation Capacity Issues

Nevada County Air Park

The Nevada County Air Park encompasses approximately 117 acres, with a total of 86 hangers, and 93 aircraft tiedowns. The Nevada County Air Park's airfield capacity is calculated at 165,000 to 180,000 annual operations. The operational capacity is well above the projected activity level in the near future.

The Nevada County Air Park's existing runway and taxiway configuration essentially meets the Federal Aviation Administration standards for airports serving aircraft which weigh no more than 12,500 pounds, have maximum wingspans of 49 feet, and have approach speeds of less than 121 knots. For the Airport to regularly accommodate other comparatively large aircraft, the major constraints are the runway length, runway width, and runway-to-taxiway separation distance.

Even if the Nevada County Air Park airfield could be significantly upgraded to properly accommodate larger aircraft, the space to park them is limited by major building area constraints.

Truckee-Tahoe Airport

The 2003 *California Aviation System Plan* lists the Truckee-Tahoe Airport as one of the North State Region's highest priority facilities in terms of system capacity and safety enhancements. The Truckee-Tahoe Airport encompasses 931 acres, with a total of 191 hangars, and paved tiedowns for over 210 aircraft. The existing runway orientations, lengths, widths, and strengths are sufficient to serve the expected mix of powered-aircraft through the 2020 planning period.

To accommodate forecast demand, enclosed T-hangar and conventional hangar space will be required. The number of tiedowns and available apron area should be sufficient for future growth. Additional Jet A fuel storage may be required to maintain an adequate supply of fuel.

The Truckee-Tahoe Airport has been historically located in an area of predominately open space or forested areas. Most urban development is located west and northwest of the Airport towards the Town of Truckee, as well as, southeast of the Airport towards Northstar. However, these new residential developments are being established much closer to airport boundaries than in the past. The Truckee-Tahoe Airport District and the Town of Truckee have entered into a Memorandum of Understanding regarding the future use of property surrounding the Airport.

Future Conditions for Air Transportation Facilities

The Air Park Master Plan analyzed three forms of airport capacity, which included airfield, building area, and environment. The airfield capacity is calculated as being between 165,000 and 180,000 annual aircraft operations. Building area was analyzed by estimating the number of aircraft parking spaces that could be created. With land needed for many of the different airport facilities, parking was calculated to be a maximum of two hundred seventy-five spaces. For environmental capacity, the Master Plan reviewed noise impacts by calculating noise contours and recording noise complaints. The results of the capacity analyses showed that none of the three forms of airport capacity would be exceeded by 2010. Major improvements to the Nevada County Air Park were completed in the spring of 1996 enhancing airport operations.

The Truckee-Tahoe Airport Master Plan was most recently updated in 2001. Total aircraft operations are expected to increase significantly over the next twenty years, which will exceed the current capacity of the airport. Short-term and long-term improvements will be required to accommodate future demand.

The Comprehensive Airport Land Use Plans for both airports identify the common goals of orderly growth of the airports and the areas surrounding the airports within the identified planning boundary, to protect the general welfare of the inhabitants within the vicinity of the airport and the public in general. The airport land use plans have guidelines that identify compatible land uses in the various safety zones. The airport land use plans also identify noise compatibility criteria for development projects within the airport land use planning area. The Nevada County General Plan contains policy recommendations consistent with the Nevada County Air Park and Truckee-Tahoe Airport Comprehensive Airport Land Use Plans.

Air Transportation Facility Needs

It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of its Capital Improvement Plan (CIP) projects. The Tahoe- Truckee Airport generates revenues from operating expenses and special district property tax revenues collected within the Truckee-Tahoe Airport District. It is assumed that the Tahoe-Truckee Airport will utilize operating and property revenues to construct projects included in their CIP and as a local match for the Federal Airport Improvement Program (AIP) or State CAAP grant funding.

AVIATION ACTION PLAN

Short-Term

Short-term capital improvements for both the Nevada County Air Park and Truckee-Tahoe Airport are listed in tables 12 and 13 (page 73), which represent the projects submitted in the most recent airport Capital Improvement Plans that are eligible for funding from State and Federal funding programs.

The Truckee-Tahoe Airport is on track to have California's first Transponder Landing System in the next year or two, depending on delays in the process of installing and testing this new technology.

Long-Term

If demand warrants, consider implementation of improvements identified in both the Nevada County Air Park and Truckee-Tahoe Airport Master Plans final phases. Some of these needs are predicated

on increased demand brought on by future development and population growth. If growth and development do not occur, these improvements may not be required. Both plans recommend long-term improvements to the airfield and the building areas.

Capital Improvement Plans (CIP)

The projects shown in Tables 12 and 13 are currently included in the 2006 to 2010 Capital Improvement Programs for the Nevada County Air Park and Truckee-Tahoe Airport.

TABLE 12
NEVADA COUNTY AIR PARK CIP LIST

Project Description	**Est. Project Cost $**	**Program Year**
1. AWOS Phase II Construction	170,500	2006
2. Ramp II, Phase II Construction	670,000	2006
3. Drainage Improvement Engineering	220,000	2006
2006 SUBTOTAL	*$1,060,500*	
4. Drainage Improvement Construction	1,430,000	2007
5. Ramp 5 Rehabilitation Engineering	75,000	2007
2007 SUBTOTAL	*1,505,000*	
6. Ramp 5 Rehabilitation Construction	500,000	2008
2008 SUBTOTAL	*500,00*	
7. Perimeter Fencing	137,500	2009
2009 SUBTOTAL	*137,500*	
8. Acquire Land (Lot 6)	550,000	2010
2010 SUBTOTAL	*550,000*	
TOTAL FIVE YEAR CIP	**$3,753,000**	

TABLE 13
TRUCKEE-TAHOE AIRPORT CIP LIST

Project Description	**Est. Project Cost $**	**Program Year**
1. Construct Apron for New Terminal & New De-icing Hangar	2,000,000	2006
2. Construct De-icing Hangar	1,600,000	2006
3. Purchase Snow Removal Equipment	350,000	2006
4. Masterplan Update/Part 150 Noise Study	600,000	2006
5. Provide GIS for Airport	110,000	2006
2006 SUBTOTAL	*4,660,000*	
6. Construct Aprons & Taxi-lanes for New T-Hangars	200,000	2007
7. Construct 16 Nested T-Hangars	1,200,000	2007
8. Reconstruct Portion of Runway 10-28	1,350,000	2007
9. Airfield Security	1,050,000	2007
2007 SUBTOTAL	*3,800,000*	
10. Construct Taxi-lane & Reconstruct RW 10 Holding Apron	520,000	2008
11. Design of New Terminal Building	350,000	2008
2008 SUBTOTAL	*870,000*	
12. Construct Terminal Building & Parking Lot	7,000,000	2009
2009 SUBTOTAL	*7,000,000*	
13. Construct Taxi-lane for New Box Hangars	200,000	2010

14. Construct 6 Box Hangars	1,200,000	2010
2010 SUBTOTAL	*1,400,000*	
CIP TOTAL	**17,730,000**	

FIGURE 5 AIR TRANSPORTATION

RAIL TRANSPORTATION

Existing Conditions of Rail Transportation Facilities

Union Pacific Railroad (UPRR) owns and operates tracks that follow Interstate 80 along the southern border of Nevada County (Figure 6 on page 80). The rail line is used for the shipment of goods and people. Currently, Amtrak's California Zephyr serves the San Francisco to Chicago Corridor with a daily train in each direction, through stations in Sacramento, Roseville, Colfax, Truckee, and Reno.

The Truckee Intermodal Transportation Center is an important facility located in eastern Nevada County, which serves transit, rail, automobiles, trucks, bikes, and pedestrians.

Historically, highways are publicly owned, while railroads have been under private ownership. Public funds have been available for public roads, but not for railroads. Only in the last twenty-four years since Amtrak was created, have public funds been available for passenger rail. While passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) improved upon the Interstate Highway Era by making federal funds flexible, the flexibility is limited to urban and commuter transit projects. The ability to provide passenger rail options would be enhanced by implementing a rail development process similar to the highway development process, and fully integrating passenger rail options into transportation problem solving.

Although California statute allows Caltrans to design and construct intercity passenger rail projects and purchase right-of-way, traditional modal funding mandates restrict Caltrans ability to facilitate the development of non-highway modes. Recent investments in intercity rail have been largely the result of one-time capital funding provided by bond funds.

INTERSTATE 80 CORRIDOR

The 250 kilometer Union Pacific mainline between Sacramento, California and Sparks, Nevada has the longest continuous railroad grade in the world.

The railroad has proved to be a highly reliable mode of transportation. In the 105-year period between 1889 and 1994, the railroad was shut down because of snow only five times. With the exception of the thirteen day closure in January 1952 that stranded the *City of San Francisco* streamliner for seventy-two hours, and closed Interstate 80's predecessor, US 40, for about three weeks, the other four rail shut downs lasted from between one to three days.

On the other hand, during the eighteen years between 1974 and 1993, Interstate 80 was closed a total of 588 times, (an average of about 31 times per season) for a total of 2,375 hours or an average of 5.21 days per season.

In the I-80 Corridor, the rail line is underutilized for passenger rail services. The easiest way to increase capacity along this corridor with minimal cost and degradation to air quality, and without harming the environment, is to increase the passenger rail mode option by extending the Capitol Corridor service to Reno/Sparks, Nevada. The addition of only one or two passenger trains per day will provide an alternative mode of travel to the mountain ski resorts, the Lake Tahoe Basin, the Town of Truckee, and Reno/Sparks without significantly hindering the freight capacity of the line.

The existing Amtrak train, the *California Zephyr*, which runs between Oakland and Chicago, does not adequately serve the needs of local Bay Area to Reno/Sparks Corridor travelers. Travel on the

California Zephyr requires a reservation, while Amtrak fare and booking policies discourage or exclude local trips in favor of long haul passengers. The westbound train, which originates in Chicago two days earlier, is not reliable for travelers' day-use needs in the western end of the corridor. However, the extension of one or two Capitol Corridor trains per day, with fares and schedules that serve the local traveler and with good marketing, could provide transportation for up to one thousand passengers per train.

A survey conducted by the Truckee/North Tahoe Transportation Management Association and the Placer County Transportation Planning Agency (PCTPA) in March 1994, indicated skiers interest in rail transportation in the I-80 Corridor. Survey results showed that 94% of all respondents traveled by automobile to the ski areas. When asked if they wanted a ski train, 61% of all respondents said "Yes" and 14% said "No", 70% said they would take a ski train during bad weather, and 11% said they would not. When asked if they would take a ski train instead of facing holiday delays on I-80, 75% said "Yes", and 10% said "No."

The ski market was not included in calculating ridership estimates in the Caltrans Sacramento-Tahoe-Reno Intercity Rail Study. The survey results indicate there is potentially a substantial ski market. While a significant overall mode split for rail is not assumed, skiers could increase ridership on Capitol Corridor extension trains, and possibly lessen travel demand on I-80, especially during peak demand periods.

Future Conditions for Rail Transportation Facilities

In 1995, Caltrans completed a study of the potential for intercity rail operations between Sacramento and Reno. Key conclusions and findings from this study included:

- The extension of the Capitol Corridor service to Reno/Sparks would have a positive impact on the farebox recovery ratio for the entire Capitol Corridor service.
- There is a potentially significant rail market for skiers, which has not yet been included in the patronage estimates for intercity rail service in the I-80 Corridor.
- By the year 2020, Caltrans District 3 will be faced with the need to provide transportation capacity for an additional one million people.
- Air quality and economic and financial constraints will limit the improvements to the highway system, making multimodal alternatives, especially the mass transportation services, of major importance.
- Lack of public funding for railroads will be a constraint to implementing service in this corridor.
- The development of passenger rail transportation as an alternative mode of travel to the Tahoe Basin and the Reno/Sparks area will provide improved access to world-renowned recreational attractions, help prevent environmental degradation, and will provide for the continued economic vitality of the region.

Recommendations from the study are listed below:

- Caltrans and the Nevada County Department of Transportation should work closely with Amtrak, the local jurisdictions in the I-80 Corridor, the ACR 132 Policy Advisory Committee, and private businesses in the Reno/Sparks and Lake Tahoe areas to develop an implementation plan for expanding Capitol Corridor service between

Sacramento and Reno/Sparks. This implementation plan should include a realistic funding program which reflects the major constraints with Caltrans, Nevada County Department of Transportation, and Amtrak.

- Representatives from the Nevada County Transportation Commission, Washoe Regional Transportation Commission, and the State of Nevada should be invited to join the ACR 132 Policy Advisory Committee and participate in the development of the implementation plan for extending the Capitol Corridor service to Reno/Sparks.
- Caltrans and the Nevada County Department of Transportation should coordinate with local and regional operators to connect feeder bus service between Truckee, Tahoe City, and South Lake Tahoe via California Highway 89 and Nevada Highway 28, with a schedule that meets the proposed extension of the Capitol service in Truckee.

In 2000, Amtrak completed a 20-Year Plan for rail service in California that also concluded that it would be feasible and desirable to expand the Capitol Corridor service to Reno.

In 2003, NCTC, PCTPA, Capitol Corridor Joint Powers Authority (CCJPA), the Town of Truckee, and interested businesses in the North Tahoe area decided to jointly fund a study exploring the feasibility of extending daily Capitol Corridor service to Reno. This study has been suspended until the UPRR can complete its own evaluation of the extent of the growing demand for freight services and capacity in the corridor. Once this evaluation by UPRR is completed in a year or two it is hoped that interest in the extension of the Capitol Corridor passenger service can be revitalized.

Rail Transportation Facility Needs

Due to the lack of rail facilities in Nevada County, and data describing facility operations, short-term needs could not be determined. Long-term needs have been identified in the *Nevada County Rail Feasibility Study*. The long-term need for rail transit services in Nevada County is based on excessive automobile demand on local and state roadways, as well as, obtaining local goals to reduce environmental impacts on the County's transportation system.

The long -term rail transit needs as identified by the *Nevada County Rail Feasibility Study* includes implementing the I-80 Bay Area-Truckee/Reno winter train service. Initially, the service should be operated only during winter months, which is the strongest market base on which to build patronage. The study states that this service has the potential to cover all of its operating costs through passenger fares. Initially, the service is not expected to significantly reduce automobile travel in the I-80 Corridor. Nevertheless, as the Corridor becomes increasingly congested, this service will become a more attractive alternative to the automobile.

Timed transfers can be made in Placer County at the Auburn Depot between Gold Country Stage Route 5/5X, Placer County Transit, Auburn Transit, and Amtrak Capital Corridor trains. The Gold Country Stage Route 5X express bus feeder service was implemented in June of 2005 through an agreement with the Capital Corridor Joint Powers Authority and Amtrak to fund this express connection to the Amtrak Capital Corridor trains in Auburn. The future provision o additional Capital Corridor trains to Auburn will make the service more convenient for Nevada County residents and increase ridership.

The Action Plan of the *Nevada County Rail Feasibility Study* indicated that successful implementation of rail programs would present various challenges and require aggressive and focused programs, including the following: 1) additional detailed planning and feasibility studies for projects identified in this preliminary study, 2) development of a strong local and/or regional advocacy for projects, 3) establishment of a reliable funding source for both capital needs and

ongoing costs for maintenance and operations, and 4) interjurisdictional agreements on basic program strategies and responsibilities.

RAIL ACTION PLAN

Short and Long-Term

1. Encourage expansion of the Amtrak Capitol Corridor passenger service to Colfax, Soda Springs, Truckee, and Reno/Sparks. (NCTC, PCTPA, CCJPA, Caltrans, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA)
2. Support federal legislation to provide funding for rail corridors, including the Amtrak Capitol Corridor. (NCTC, PCTPA, CCJPA, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA, Federal representatives)
3. Support expansion of additional Capitol Corridor passenger trains to Auburn. (NCTC, PCTPA, TSC, DOTS)

FIGURE 6 RAIL TRANSPORTATION

AIR QUALITY

Existing Air Quality Conditions

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as an isolated rural "basic non-attainment" area under the Federal 8-hour ozone national air quality standard. The “basic” designation recognizes that the cause of exceedences of state ozone standards occurs primarily from the transport of pollutants generated outside of Nevada County. The primary source of Nevada County’s ozone pollution is from the broader Sacramento area and, to a small degree the San Francisco Bay area. Table A-2 of the appendix displays ozone data from the Grass Valley monitoring station and ozone precursor forecasts for Nevada County.

The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. EPA uses the average of the annual fourth highest 8-hour daily maximum concentrations of ozone from each of the last three years of air quality monitoring data to determine a violation of the ozone standard.

Regional Air Quality Planning

Isolated rural non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation or transit project. The "Conformity" finding must show that the project, along with all of the regionally significant federal and non-federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the severity of NAAQS violations, or delay timely attainment.

To ensure the coordination of transportation planning and air quality efforts a Memorandum of Agreement was developed to identify the interagency coordination process and the responsibilities of the agencies involved. Through this process the Western Nevada County Conformity Working Group was established. This group is made up of representatives from the Nevada County Transportation Commission, Northern Sierra Air Quality Management District, Caltrans, California Air Resources Board, U.S. Environmental Protection Agency, Federal Highway Administration, and Federal Transit Administration. The purpose of this technical working group is to provide interagency consultation and coordination on transportation conformity.

Non-attainment areas are also required to prepare and submit a SIP no later than three years after the date of designation. The SIP is an air quality plan developed by the California Air Resources Board, in cooperation with local air districts, to attain and maintain Federal Clean Air Act Standards. The SIP for western Nevada County will identify all sources of emissions of pollutants that exceed Federal standards in the non-attainment area and detail the strategies the area will utilize to meet the NAAQS. The SIP for our region will be incorporated into a statewide SIP that will outline the measures that the State will take in order to improve air quality in non-attainment areas.

The Northern Sierra Air Quality Management District (NSAQMD) works in conjunction with the NCTC and California Air Resources Board to prepare an air quality attainment plan for western Nevada County. NSAQMD is charged with the responsibility to attain and maintain the State and Federal ambient air quality standards, and depend upon local ordinances and/or public education and voluntary programs to prevent the deterioration of ambient air quality.

Nevada County is within the Mountain Counties Air Basin. This basin is classified as “non-attainment” for ozone and PM-10, and is either “attainment” or unclassified for other pollutants. Other automobile generated pollutants are PM2.5 and carbon monoxide. Historically, carbon monoxide has not been monitored in high enough levels to be a concern in Nevada County.

Recently, the U.S. EPA promulgated new, more stringent National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter. As of mid-1997, a more stringent 8-hour ozone standard was promulgated to replace the 1-hour ozone standard. At the same time, EPA also promulgated a NAAQS for PM2.5 (particulate matter with an aerodynamic diameter less than 2.5 microns).

Future Air Quality Conditions

Integration of the Regional Transportation Plan and the Air Quality Plan is recommended by the California Air Resources Board (CARB) to facilitate implementation of emission reducing measures when appropriate. Specifically, the RTP must address transportation performance standards of the California Clean Air Act. Nevada County is required to adopt all reasonably available transportation control measures.

The CCAA does not define what measures are reasonably available or how decisions on "reasonableness" are to be made. According to the *California Clean Air Act Transportation Requirements Guidance*, February 1990, prepared by the CARB, the air quality management districts, in coordination with local and state transportation agencies, have the primary responsibility to determine the measures that are reasonable, and to ensure that those so deemed are included in the district's air quality plan. In this case, the NCTC is coordinating with NSAQMD and appropriate agencies in the development and adoption of Transportation Control Measures for Nevada County. Additional strategies and programs may be identified in the attainment plan that is to be prepared by the NSAQMD.

To demonstrate the overall on-road regional emissions projections for the County, the CARB Almanac Emission Projection Data published in 2005 was utilized. Table 14 displays estimates of on-road motor vehicle emissions based on motor vehicle fleet emission data and travel data for Nevada County. The CARB Almanac Emission Projections for Nevada County demonstrates that between 2005 and the year 2020 emissions of reactive organic gases, nitrogen oxides, carbon monoxide, and sulfur oxides are expected to decrease an average of 56 % from 2005 emission levels (see Table 14). This is the case even though vehicle miles traveled are expected to increase approximately 57 % by the year 2020. This substantial decrease in emissions is related to assumptions in the modeling regarding improving emission rates for vehicles due to state emission control programs.

Additionally, the RTP seeks to reduce air quality issues associated with future growth by increasing the efficiency of the transportation system and increasing alternative transportation options.

Table 14
CARB Almanac Emission Projection Data
Estimated County-Wide Emissions from Vehicles in Nevada County
2005, 2010, 2015 and 2020

Pollutant/ Parameters

Daily Emissions in Tons/Day for:	2005	2010	2015	2020	Percentage Change
Reactive Organic Gases	3.532	2.565	1.858	1.422	60% Decrease
Carbon Monoxide	31.396	21.879	14.594	10.114	68% Decrease
Nitrogen Oxides	4.673	3.398	2.275	1.550	67% Decrease
Sulfur Oxides	0.027	0.017	0.017	0.019	30% Decrease
Daily Vehicle Miles Traveled	2,869,000	3,456,000	3,963,000	4,492,000	57% Increase

AIR QUALITY ACTION PLAN

Short-Term and Long-Term

1. Conduct interagency consultation as needed to review transportation related air quality issues. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)

2. Complete a Transportation Conformity Analysis on regionally significant transportation projects when federal funding or federal approval is required in coordination with local, state, and federal agencies. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)

3. Coordinate with NSAQMD during the development of the State Implementation Plan for Nevada County. (NCTC, NSAQMD)

4. Administer the selection of projects eligible for Congestion Mitigation Air Quality funds in western Nevada County for projects that reduce emissions and improve air quality. (NCTC, NSAQMD)

V. FINANCIAL ELEMENT

INTRODUCTION

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the 2005 RTP.

The Action Plan calls for an extensive list of improvements over the period of the Plan. As is true in many other areas of the state, there is not enough existing Federal, State, or regional resources to fully fund all of the improvements necessary.

This financial analysis presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds. It also identifies the unconstrained (unfunded) State highway and regional roadway needs.

State Highways Facilities

The NCTC currently has a total of $25,443,000 of Regional Improvement Program (RIP) funds programmed in the State Transportation Improvement Program (STIP) for the Dorsey Drive Interchange, SR 49 widening, and the SR 89 widening of the "Mousehole". Caltrans currently has $9,050,000 of Interregional Improvement Program (IIP) matching funds programmed in the STIP for the SR 49 widening project in the vicinity of La Barr Meadows Road in western Nevada County. Estimates of future revenues for State highway improvements are consistent with the California Department of Transportation's 2006 STIP Fund Estimate. Based on this estimate of the STIP revenue forecasts, the Financial Element of the RTP assumes additional programming capacity of approximately $1,000,000 of RIP funds a year beginning in 2014. Therefore, over the period of the RTP the financial element assumes a total of approximately $13,000,000 in additional RIP funding.

Recognizing that the Dorsey Drive Interchange is a top priority for the community, the financial element assumes that the $13,000,000 in forecasted RIP revenues will be programmed to cover the existing construction deficit and any additional cost increases.

Regional Roadways

Revenues for regional roadway improvement projects off the state highway system were based on funding forecasts of the Regional Transportation Mitigation Fee Program, and local jurisdiction development fee programs.

Funding for transportation improvements has historically been a problem in Nevada County. Decreases in gas tax revenues, coupled with increased capital needs for repair and retrofit of bridges throughout the state, precluded the completion of any major improvements for Nevada County between 1990 and 1995.

While Senate Bill 45 and the Transportation Equity Act for the 21st Century have provided some funding for local projects, street and road maintenance needs are still under-funded. In the early 1990's there was concern about the deteriorating condition of the Nevada County's public road system. A 1993/94 Grand Jury Report documented $26,000,000 of road maintenance backlog. As a result, a group of concerned citizens circulated an initiative to adopt an ordinance requiring expenditures of Motor Vehicle In-lieu Fees (MVF) for road maintenance. The initiative was placed on the March 1996 ballot as "Measure F" and was approved by voters and implemented by the

Board of Supervisors. Even with five years of "Measure F" expenditures, there remains a county backlog in excess of $20,000,000. The Nevada County Department of Transportation and Sanitation indicates that with "Measure F" funding combined with revenue from the Transportation Congestion Relief Program (TCR) AB 2928 and the County road fund, of the 410 County maintained paved miles, 387 miles will be considered in good condition with only 23 miles remaining in fair or poor condition by 2016. The maintenance of the roads in the County maintained system never ends and is necessary to protect the investment that has been made in the system since 1997. Without "Measure F" funding, the remaining funds would only be enough to respond to system failures and there would be no on-going maintenance.

Transit Services

Based on the Five-Year Transit Development Plans for western and eastern Nevada County, it was assumed that transit operating expenses would increase 3 % per year, which would be approximately equal to the rate of inflation. Revenue projections were based on the forecasted amount of transit revenue assumed to be available over the period of the RTP. The revenue forecasts indicate that both public transit systems in western and eastern Nevada County will have sufficient revenue over the plan period.

Non-Auto Facilities

It is assumed that the majority of non-motorized facilities in Nevada County will be funded through State grant programs, such as the State Bicycle Transportation Account, which had a funding level of $7,200,000 statewide in 2005.

Aviation

The most recent Capital Improvement Programs were used to determine the improvement costs for Nevada County's aviation facilities. It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of the Capital Improvement Plan (CIP) projects.

IMPROVEMENT FUNDING PROGRAMS

Regional Funding Programs

The funding programs listed below describe the funding programs administered by the Nevada County Transportation Commission.

- ***Local Transportation Fund***. Local Transportation Funds (LTF) is a revenue source generated by the 1/4 cent of the 7 ½ cent retail sales tax collected statewide. Funds are apportioned to each county based on the amount of tax collected in that county. In Nevada County, the NCTC has the authority to allocate LTF for transit, roadway, pedestrian, and bike projects. If NCTC finds that there are no unmet transit needs that are reasonable to meet, the remaining monies are available for use on development and maintenance of streets and highways.
- ***Regional Transportation Mitigation Fee Program***. The Nevada County Transportation Commission managed a study process that defined the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identified the

financial resources needed to pay for the investments. The County of Nevada and the cities of Grass Valley and Nevada City participated in these studies at both the policy and technical levels. The study resulted in the development and adoption of the Regional Transportation Mitigation (RTMF) Fee Program.

The purpose of developing the RTMF Program was to ensure that future growth would fully mitigate both its direct and cumulative impacts. The County and the two participating cities are responsible for imposing and collecting the fee in their respective areas of jurisdiction. The following criteria have been used to determine which projects should be included in an RTMF Capital Improvement Program:

"Regional projects" are generally identified as follows:

a. Projects on all ramp connections to freeways or expressways.

b. Projects on roads functionally classified as "arterials" and above.

c. Projects identified as providing regional circulation in city or county general plans and their EIRs.

When NCTC developed the RTMF, every effort was taken to ensure that the fee assessment would be tied to the actual traffic generated by each new project that would pay the fee. Moreover, the mitigation fee was structured to ensure that the amount paid by each project would not exceed the estimated and reasonable cost to mitigate the project's proportionate share of added traffic it generated. More information regarding the RTMF program is available at the NCTC office.

Potential Regional Revenue Sources

Providing adequate funding for the actions recommended in this RTP will require a combination of funding mechanisms based on need and community acceptance. Local jurisdictions will also have to rely more heavily on their own resources, as State funds are spread over an expanding number of communities throughout California. Described below are potential local funding programs that have been successful in other jurisdictions and are applicable for use in Nevada County.

- ***Local Option Sales Taxes***. These taxes have been instituted in several counties to fund transportation improvements. Future increases in traffic congestion and the limited amount of State funding available to implement needed transportation improvements may make this a viable option to Nevada County residents in the future. Local option sales tax funding for transportation improvements has been approved by voters in many of the metropolitan counties. It appears that voters are generally receptive to such a tax, when the specific projects to be funded by the tax meet the needs identified by the voters.

- ***Local Option Motor Vehicle Fuel Taxes***. These taxes can be implemented by a two-thirds endorsement of Nevada County voters and an agreement between applicable agencies on the amount of tax and allocation of revenues.

- ***Conditions of Development***. Conditions may be placed on proposed development, which contributes to a transportation system impact. A development may be conditioned to assist in the implementation of any improvement directly related to their development.

- ***Benefit Assessment District***. This allows local governments to recover the costs of public improvements directly from property owners benefiting from the project(s). The assessment is based on the premise that the transportation improvement project(s) enhances the value of the affected property. Assessments are enacted according to a zone of benefit, with each

affected parcel being assessed a specified dollar amount. The amount of revenue generated from an assessment district is dependent on the cost of its proposed public improvements.

- ***Mello-Roos Community Facilities District***. This source of revenue provides for the issuance of tax-free municipal bonds by creating a special tax assessment district to repay the debt. Local jurisdictions may form the district and levy a special tax after two-thirds approval of the voters (or if uninhabited, two-thirds of the landowners) within the proposed district. Total revenues are dependent on the costs of proposed projects.

State Funding Programs

- ***State Transit Assistance Funding***. State Transit Assistance (STA) funds are provided by the State from the Transportation Planning and Development Account pursuant to the Transportation Development Act for public transit purposes. These funds are allocated to regional transportation planning agencies pursuant to Sections 99313 and 99314 of the Public Utilities Code. The 99313 funds are allocated based on population, and the 99314 funds are allocated based on transit revenues collected.

- ***State Transportation Improvement Program***. The State Transportation Improvement Program (STIP) consists of two broad programs; 75% of the funds available to the STIP are committed to the Regional Improvement Program (RIP). Projects to be funded from the RIP are selected by regional transportation planning agencies and are included in their Regional Transportation Improvement Programs (RTIPs). The RTIP may propose to program or reserve up to 5% of the county share for project planning, programming, and monitoring by the transportation planning agency. The remaining 25% of STIP funds will be available to Caltrans for State highways, intercity rail, grade separation, and mass transit guideway improvements. This funding program is called the Interregional Improvement Program (IIP) and Caltrans list of projects will be known as the Interregional Transportation Improvement Program (ITIP). If Caltrans and a regional agency agree, they may recommend a new project be jointly funded from county and interregional shares. In that case, the region will nominate the county share in the RTIP and Caltrans will nominate the interregional share in the ITIP. RTIPs and the ITIP are submitted to the California Transportation Commission (CTC) for approval.

  Except for project planning, programming, and monitoring, all RTIP projects will be capital projects, (including project development costs), needed to improve transportation in the region. These projects generally may include, but are not limited to, improving State highways, local roads, public transit (including buses), intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwalls, intermodal facilities, and safety. Non-capital costs for transportation system management or transportation demand management may be included where the regional agency finds the project to be a cost-effective substitute for capital expenditures. Other non-capital projects (e.g. road and transit maintenance) are not eligible.

The interregional program has two parts:

1. The first, funded from 10% of the STIP funding, is nominated solely by Caltrans and projects may include State highway, intercity rail, mass transit guideway, or grade separation projects.
2. The second part, funded from at least 15% of the STIP funding, is limited to intercity rail projects and improvements outside urbanized

areas on the interregional road system.

Under restricted circumstances, a regional agency may also recommend a project for funding from the second part of the interregional program.

A regional agency may recommend improvements outside urbanized areas on the interregional road system, and the CTC may program that regional recommendation, only if the CTC makes a finding that based, on objective analysis, the recommended project is more cost-effective than a project submitted by Caltrans.

The CTC envisions an Interregional Improvement Program that works toward the achievement of the following six objectives:

1. Completing a trunk system of higher standard State highways (usually expressways and freeways).
2. Connecting all urbanized areas, major metropolitan centers, and gateways to the freeway and expressway system to ensure a complete statewide system for the highest volume and most critical trip movements.
3. Ensuring a dependable level of service for movement into and through major gateways of statewide significance and ensuring connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution facilities.
4. Connecting urbanizing centers and high growth areas to the trunk system to ensure future connectivity, mobility, and access for the state's expanding population.
5. Linking rural and smaller urban centers to the trunk system.
6. Implementing an intercity passenger rail program, (including interregional commuter rail), that complies with Federal and State laws, improves service reliability, decreases running times, and reduces the per passenger operating subsidy.

The Caltrans ITIP will be based on a Strategic Plan for implementing the interregional program. The Strategic Plan should address development of both the interregional road system and intercity rail in California.

- ***State Highway Operations and Protection Program (SHOPP).*** The SHOPP is a ten-year program developed by Caltrans for the expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the State highway system. Projects included in the SHOPP are limited to capital improvements relative to maintenance, safety, and rehabilitation of State highways and bridges, which do not add capacity to the system.
- ***Bicycle Transportation Account (BTA) Program.*** The BTA is intended to provide funds for bicycle transportation projects that improve the safety and convenience for bicycle commuters. Funding for projects is awarded through a competitive grant progress and administered by Caltrans. To be eligible for BTA funding, cities and counties must have an adopted Bicycle Transportation Plan that has been approved by the appropriate regional transportation planning agency and Caltrans.

  The statewide funding level of the BTA was $7,200,000 statewide in 2005. Applicants must provide a match of at least 10 % of the total project cost.
- ***California Aid to Airports Program (CAAP).*** CAAP encompasses three different programs administered by Caltrans Division of Aeronautics. These include discretionary grants for capital improvements, annual grants of $10,000 each to general aviation airports, and matching funds for Federal Aviation Administration (FAA) grants.

Federal Funding Programs

The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was enacted in July 2005. SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety and transit for 2005-2009. A summary of important Federal programs is listed below.

- ***Congestion Mitigation and Air Quality Program (CMAQ).*** This funding program was established by the 1991 Federal Intermodal Surface Transportation Efficiency Act (ISTEA) and was re-authorized with the passage of SAFETEA-LU in 2005. Funds are directed to transportation projects and programs that contribute to the attainment of maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas for ozone, carbon monoxide, or particulate matter under the provisions of the Clean Air Act. In 2004, western Nevada County was designated as an isolated rural "basic non-attainment" area under the Federal 8-hour ozone national air quality standard and is now eligible for CMAQ funds. The revenue available for fiscal year 2005/06 is $390,267,867 statewide and approximately $800,000 for Nevada County.

  Eligible Federal aid projects include public transit improvements; high occupancy vehicle (HOV) lanes; intelligent transportation infrastructure; traffic management and traveler information systems; employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; flexible work-hour programs; outreach activities establishing Transportation Management Associations (TMAs); and fare/fee subsidy programs.

- ***Federal Transit Administration (FTA)***. Title III of the 1991 ISTEA revised the old Urban Mass Transit Administration (UMTA) programs and redesigned the UMTA to be the Federal Transit Administration.

  1. Section 5310 Capital funds for elderly and disabled transit programs. This program is administered by Caltrans. Private non-profit corporations and public agencies are also eligible.

  2. Section 5311 Rural Transportation Assistance funds can be used for non-urbanized public transportation, both capital and operating. Although these funds are subject to federal approval, they are programmed locally by the NCTC.

- ***Regional Surface Transportation Program Funds***. The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 replaced the Federal-Aid System programs with the Surface Transportation Program (STP). The funds are approved by Congress and then passed through the State to the RTPAs. In California, Caltrans will exchange the Federal funds for State funds which have fewer administrative requirements. The exchanged funds may be used for any purpose allowed by Article XIX of the State Constitution. Those purposes include: research, planning, construction and improvement, maintenance, operation of public streets and highways (and their related public facilities of non-motorized traffic), including the mitigation of their environmental effects, the payment for property taken or damaged for such purposes, and the administrative costs related to such purposes. Article XIX also provides for some purposes related to “Mass Transit Guideways”, but there are no such facilities in Nevada County. NCTC has always exchanged its Federal funds for State funds and has programmed them for maintenance and rehabilitation of local streets and highways.

- ***Transportation Enhancement Activities (TEA).*** National policy in ISTEA included recognition that transportation programs, while vital for national mobility and international competitiveness, must also include consideration of overall environmental context and community values and setting. This policy is reflected in the TEA program, which has the intent for transportation enhancements to become a common part of the transportation investment policy integrated into many projects. TEA funds are to be used for transportation related capital improvement projects that enhance quality-of-life in or around transportation facilities. Projects must be over and above required mitigation of normal transportation projects and must be directly related to the transportation system.

- ***Airport Improvement Program (AIP)***. The Federal AIP provides grants to public agencies, private owners and entities, for the planning and development of public-use airports that are in the National Plan of Integrated Airport System (NPIAS). Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, sponsors can use AIP funds on most airfield capital improvements or repairs, except terminals, hangars, and non-aviation development.

- ***Safe Routes to School Program (SR2S)***. Caltrans has established a "Safe Routes to School" construction program utilizing Federal transportation funds for construction of bicycle and pedestrian safety and traffic calming projects. To qualify for SR2S funds, the project must be located on either a State highway or local road. Projects must correct an identified safety hazard or problem on a route that students use for trips to and from school.

STATE HIGHWAY AND REGIONAL PROJECT FUNDING FORECAST

The tables below identify the Federal, State, and regional revenue sources that are forecasted to be available for State highway and regional improvement projects during the Plan period. Forecasted revenues were then matched to the "Financially Constrained" State highway and regional transportation projects contained in Table 6 (page 39) of the RTP. Table 17 (page 91) summarizes the costs and revenues of the "Financially Constrained" projects. Table 18 (page 92) below identifies the amount of the financially unconstrained (unfunded) State highway and regional transportation needs contained in Table 7 (page 43) of the RTP.

TABLE 15
State Highway Project Revenue Forecast (In Thousands $)

Revenue Source	Short-Term 2005-2015	Long-Term 2016-2027	Total Revenue
RIP Funding Forecast	28,348	11,000	39,348
IIP Funding Forecast	9,050	0	9,050
Federal Earmark	2,828	0	2,828
SHOPP Funding Forecast *	0	6,800	6,800
Total	40,226	17,800	58,026

* SHOPP funding forecasts are only for identified "regional projects" included in Table 6 (page 39). The 10-year SHOPP Plan for Nevada County is included in Appendix A-5 (page 114).

TABLE 16
Regional Roadway Project Revenue Forecast (In Thousands $)

Revenue Source	Short-Term 2005-2015	Long-Term 2016-2027	Total Revenue
RTMF Program	2,481	10,160	12,641
Grass Valley Dev. Fee	1,162	415	1,577
Nev. Co. Dev. Fee	2,950	1,140	4,090
Nev. Co. DOTS	600	5,027	5,627
Truckee Traffic Fee	25,010	10,500	35,510
Developer Funded	4,000	0	4,000
Total	36,203	27,242	63,445

*Funding forecasts are only identified for the "regional projects" included in the associated fee programs in western and eastern Nevada County.

TABLE 17
Summary of Costs and Revenues
Financially Constrained State Highway and Regional Projects (In Thousands $)

Financially Constrained Projects and Costs From Table 6 (Page 39)				
Revenue Source	Short-Term Costs 2005-2015	Long-Term Costs 2016-2027	Total Costs	Total Revenue
State Highway Projects				
RIP Funded Projects	26,348	5,036	31,384	39,348
IIP Funded Projects	9,050	0	9,050	9,050
Federal Earmark	2,828	0	2,828	2,828
SHOPP Funded Projects	0	6,800	6,800	6,800
Total	45,026	5,036	50,062	58,026
Regional Projects				
RTMF	2,481	10,160	12,641	12,641
Grass Valley Dev. Fee	1,162	415	1,577	1,577*
Nev. Co. Dev. Fee	2,950	1,140	4,090	4,090*
Nev. Co. DOTS	600	5,027	5,627	5,627
Truckee Traffic Fee	25,010	10,500	35,510	35,510*
Development Funded	4,000	0	4,000	4,000
Total	36,203	27,242	63,445	63,445

***** Revenue forecasts are only for the identified "regional projects" included in the associated jurisdictional fee programs in western and eastern Nevada County.

TABLE 18
Summary of Costs and Deficits
Unconstrained (Unfunded) State Highway and Regional Projects (In Thousands)

Unconstrained Project Costs From Table 7 (Page 43)				
	Short-Term Costs 2005-2015	Long-Term Costs 2016-2027	Total Costs	Deficit
State Highway Projects				
Western Nev. Co.	55,150	88,900	159,204	(144,050)
Eastern Nev. Co.	214,674	1,500	216,174	(216,174)
Total	269,824	90,400	375,378	(375,378)
Regional Projects				
Western Nev. Co.	12,354	2,800	15,154	(15,154)
Eastern Nev. Co.	14,326	0	14,326	(14,326)
Total	26,680	2,800	29,480	(29,480)

TABLE 19
Regional Surface Transportation Program (RSTP) Revenue Forecast* (In Thousands $)

	Short-Term 2005-2015	Long-Term 2016-2027	Total Revenue
Nevada County	6,629	15,195	21,824
Grass Valley	1,282	2,939	4,221
Nevada City	301	689	990
Truckee	1,544	3,538	5,082
Total	9,756	22,361	32,117

*RSTP revenue projections assume a conservative 3% annual increase beyond 2005/06.

TRANSIT FUNDING FORECASTS

The tables below identify the Federal, State, and local revenue sources that are forecast to be available for the operation of public transit during the Plan period. Forecasted revenues were then compared to the projected operating costs for public transit services in western and eastern Nevada County and detailed in Tables 27 & 29 on page 96.

TABLE 20
Local Transportation Fund (LTF) Apportionment Forecast (In Thousands $)

	Nevada City	Grass Valley	Nevada County	Truckee	Total All Jurisdictions
Short-Term 2005-2015	820	3,498	18,087	4,212	26,617
Long-Term 2016-2027	1,365	5,820	30,092	7,007	44,284
Total Each Jurisdiction	2,185	9,318	48,179	11,219	70,901

Assumes a conservative increase of 3% per year in LTF apportionments projected from the FY 05/06 Revised Findings of Apportionment.

TABLE 21
Forecast of Community Transit Service Revenues (In Thousands $)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	1,401	2,331	3,732

Assumes a conservative annual 3% increase beyond FY 05/06.

TABLE 22
Transit Fare Revenue Forecast (In Thousands $)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Gold Country Stage	3,046	5,067	8,113
Gold Country Telecare	1,245	2,072	3,317
Truckee Trolley	958	1,197	2,156
Truckee Dial-A-Ride	240	400	640

The fare revenue forecast assumes a conservative 3% annual increase. Fare revenue forecasts for the Truckee Trolley include $85,500.00 of annual contributions from private partnerships and are assumed to continue at the FY 04/05 amount for the purpose of this forecast.

TABLE 23
State Transit Assistance Revenue Forecast (In Thousands $)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Truckee	327	543	870
Nevada County	1,889	3,143	5,032

The PUC 9913 and 9914 STA revenues are projected to increase by 3 % per year beyond 2004/05.

TABLE 24
Federal Transit Administration (Section 5311) Revenues Forecast (In Thousands $)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	3,370	4,045	7,415
Town of Truckee	635	762	1,397

Section 5311 revenues were projected to continue at the fiscal year 2004/05 funding level.

TABLE 25
Capital Corridor Joint Powers Authority Route 5X Revenue Forecast

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	1,109	1,844	2,953

Revenue forecast assumes a conservative annual increase of 3%.

TABLE 26
Summary of Transit Revenues for Western Nevada County (In Thousands)

Transit Revenue	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
LTF Funds	22,406	37,278	59,684
CTS Funds	1,401	2,331	3,732
Fare Revenue	4,291	7,139	11,430
STA Funds	1,889	3,143	5,032
FTA 5311 Funds	3,370	4,044	7,414
CCJPA Rte. 5X Funds	1,109	1,844	2,953
Total	34,466	55,779	90,245

TABLE 27
Comparison of Projected Western Nevada County Transit/Paratransit Revenue and Operating Costs (In Thousands)

	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
Projected Transit Revenue	34,460	55,780	90,246
Projected Transit/Paratransit Operating Costs*	33,177	55,199	88,376
Balance	1,289	581	1,870

* Assumes annual 3% escalation in operating costs beyond the projected FY 05/06 operating costs fixed route and paratransit services in western Nevada County.

TABLE 28
Summary of Transit Revenues for Eastern Nevada County (In Thousands)

Transit Revenue	E. Nevada County Short-Term 2005-2015	E. Nevada County Long-Term 2016-2027	Total
LTF Funds	4,212	7,007	11,219
Fare Revenue	1,198	1,597	2,795
STA Funds	326	543	869
FTA 5311 Funds	635	762	1,397
Total	6,371	9,909	16,280

TABLE 29
Comparison of Projected Eastern Nevada County Transit/Paratransit Revenue and Operating Costs (In Thousands)

	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
Projected Transit Revenue	6,371	9,909	16,280
Projected Transit/Paratransit Operating Costs*	5,429	9,033	14,462
Balance	942	876	1,818

* Assumes annual 3% escalation in operating costs beyond FY 04/05 operating costs for fixed route and paratransit services in eastern Nevada County.

NON-MOTORIZED TRANSPORTATION FUNDING

Funding sources administered by NCTC that are eligible for non-motorized transportation projects include Local Transportation Fund (LTF) Pedestrian and Bicycle funds, Transportation Enhancement Activities (TEA) funds, and Congestion Mitigation Air Quality (CMAQ) funds. Forecasts of LTF Pedestrian and Bicycle funds, assuming an annual increase of 3% beyond FY 2005/06, indicate approximately $1,446,400 will be available over the Plan period. TEA funding forecasts, assuming to continue at the annual amounts based on the six-year 2005 Federal Transportation Reauthorization, indicate approximately $4,161,650 will be available over the Plan period. Forecasts of CMAQ funding revenue for western Nevada County, assuming a 5% increase beyond FY 2005/06, indicates approximately $31,336,517 will be available over the Plan period.

However, due to specific air quality non-attainment issues, it can be assumed that the majority of CMAQ funding is utilized towards projects that will make more measurable improvements to air quality, such as replacement of vehicles with alternatively or clean fueled vehicles. The majority of non-motorized facilities in Nevada County will be funded through State grant programs, such as the State Bicycle Transportation Account, which had a funding level of $7,200,000 statewide in 2005.

AVIATION FUNDING

It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of the Capital Improvement Plan (CIP) projects. The Tahoe- Truckee Airport generates revenues from operating expenses and special district property tax revenues collected within the Truckee-Tahoe Airport District. It is assumed that the Tahoe-Truckee Airport will utilize operating and property revenues to construct projects included in their CIP and as a local match for the Federal Airport Improvement Program (AIP) or State CAAP grant funding.

APPENDIX